HITACHI

Auto Installation System- only plug in all leads and press the OPERATE button.

VIDEO CASSETTE RECORDER

VT-FX950E(UKN)

Instruction manual

VIDEO Plus+®

VIDEO Plus+ and PlusCode are registered trademarks of Gemstar Development Corporation. The VIDEO Plus+ system is manufactured under licence from Gemstar Development Corporation.

SETTING UP

BASIC OPERATIONS

ADDITIONAL OPERATIONS

SUBSIDIARY INFORMATION

VHS
PAL
QR 32431

FOR FURTHER INFORMATION PLEASE CONTACT OUR CUSTOMER HELP LINE ON 01628-643029

To obtain the best performance please read this instruction manual completely.

Dear Hitachi Customer

Congratulations on your choice of a Hitachi Video Cassette Recorder (VCR).
And welcome to our company-wide commitment to your complete satisfaction and viewing enjoyment.

INFORMATION FOR YOUR SAFETY

Please read the following instructions carefully before using this VCR.

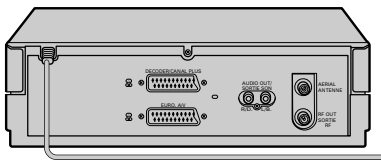
The mains lead on this equipment is supplied with a moulded plug incorporating a fuse, the value of which is indicated on the pin face of the plug. Should the fuse need to be replaced, an ASTA or BSI approved BS1362 fuse must be used of the same rating.
If the fuse cover is detachable never use the plug with the cover omitted.
If a replacement fuse cover is required, ensure it is of the same colour as that visible on the pin face of the plug. Fuse covers are available from your dealer.
DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.
If there is no alternative to cutting off the mains plug, ensure that you dispose of it immediately, having first removed the fuse, to avoid a possible shock hazard by inadvertent connection to the mains supply.

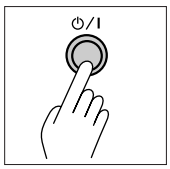
IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:
Blue = Neutral, Brown = Live
As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.
On no account connect either of these wires to the terminal marked E or by the earth symbol ⏚ or coloured green or green and yellow.

WARNING: To prevent fire or electric shock, do not expose this equipment to rain or moisture.

Mains supply: AC 230V, 50 Hz only





- The OPERATE button located on the front of the VCR switches the VCR on and off, leaving the clock facility unaffected.
- The OPERATE button is labelled " ⏻ / I ", this button allows you to select operate on or electrical power standby.
- The OPERATE button is secondarily connected and does not separate the apparatus from the mains supply in the switched-off position.

Safety

- Do not remove panel covers by unscrewing.
  There are no user serviceable parts inside. Refer all servicing to qualified service personnel.
- Should any solid object or liquid fall into the cabinet, remove the mains lead and have it checked by qualified personnel before operating it any further.
- To disconnect the mains lead, pull out the plug itself. Never pull the lead.
- If the unit is to be left unattended for a long period and it is not intended to use the timer recording function, it is recommended that the VCR be switched off and the plug removed. If you intend to record during your absence, remember there is no necessity for the TV receiver to be switched on.

Cautions:
When the VCR is moved from a cold to a warm place, **dew** condensation can occur on the cylinder.
To avoid damaging the cylinder or tape **do not operate** the set immediately. Allow it to dry **by leaving it powered on** for 2 ~ 3 hours.

CONTENTS

This instruction manual consists of the following four sections.

CAUTION:

AUTO INSTALLATION SYSTEM - Please ensure that all leads are connected as illustrated as in page 6 and 7, otherwise auto installation will not work.

Section-1 Setting Up

This section tells you how to set up your new VCR and how to use the VCR's controls.

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Setting the Clock Manually 19
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This section tells you how to playback a tape and record a TV programme.

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Section-3 Additional Operations

This section tells you how to use the additional functions.

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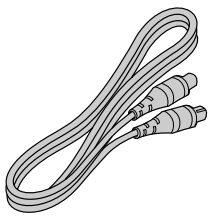
FEATURES

- **The VIDEO Plus+® programming system allows you to programme the VCR for timer recording by simply entering a PlusCode® programming number.**
- **Tape Finder function allows you to search for a programme you want to view or the point from which you want to start recording on tape with one press.**
- **Prepare Rec function allows you to easily prepare the VCR to record signals from a satellite/cable decoder.**
- **The built-in digital stereo sound decoder permits the reception of NICAM (Near Instantaneous Compand Audio Multiplex) broadcast.**
- **Setting the clock using a PDC signal (Auto clock set).**
- **Dynamic picture equalizer.**
- **Up to 8 hours recording and playback.**
- **High quality slow motion/still frame pictures.**
- **Infrared remote control.**
- **Auto Install System (Plug and Play)** — tunes in stations, sorts into correct order, sets clock and date.
- **Auto Tuning** — tunes in stations, sorts correct order, sets clock.
- **2 Scart sockets.**
- **Fine slow motion.**
- **Phono audio outputs.**
- **Graphic OSD.**
- **Satellite or cable box decoder socket provided.**
- **8-programme/1-year preset recording.**
- **NTSC Playback**
- **Stereo Sound — record and playback.**
- **Automatic controls for easier operation.**
  - —Auto Programme Play immediately starts to play a recorded programme by simply turning the VCR on after timer recording was finished.
  - —Auto Tracking system automatically adjusts the tracking so the picture is optimized.
  - —Rental Play immediately starts to play a tape without its safety tab, rewinds the tape after play is ended and ejects it, then turns the VCR off .
  - —Auto Play immediately starts to play a tape without its safety tab.
  - —Auto Eject & Auto Tape Canceller ejects a cassette without its tab when the REC button is pressed.
  - —Auto Operate On turns the VCR on by simply inserting a cassette.
  - —Auto Rewind/Rewind Shut-off automatically rewinds a tape at its end and automatically shuts off at its beginning if the VCR is switched off into the standby mode while rewinding.
- **Easy preset tuning provides up to 49 programmes.**
- **PDC (Programme Delivery Control) function** — no chance of missing your timer programme.

Accessories supplied

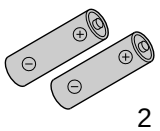
Check and identify the accessories supplied.
If any are missing or appear damaged, consult your dealer.

① 

Aerial Cable for connecting this VCR and a TV

②

Remote Control Handset

③ 

2 pcs.

Batteries for remote control handset (R6)

Section-1 Setting Up

Connection Pages 6 — 7

This tells you how to connect your VCR to an aerial, TV, etc.

Customer Controls and Remote Operation Pages 8 — 9

This tells you the location and the detailed functions of the switches, buttons, VCR's display and connection terminals on the VCR.
This also tells you how to insert batteries into the remote control handset and how to operate your VCR remotely.

Auto Installation Function Pages 10-11

This tells you how to automatically tune in all broadcasted channels and set the clock and date.

Pre-tuning of Built-in TV Tuner Pages 12 — 17

This VCR incorporates a complete TV tuner (just like your normal TV) and can be pre-tuned to receive up to 49 TV programmes.

Auto Clock Setting using PDC signal and Setting the Clock Manually Pages 18 — 19

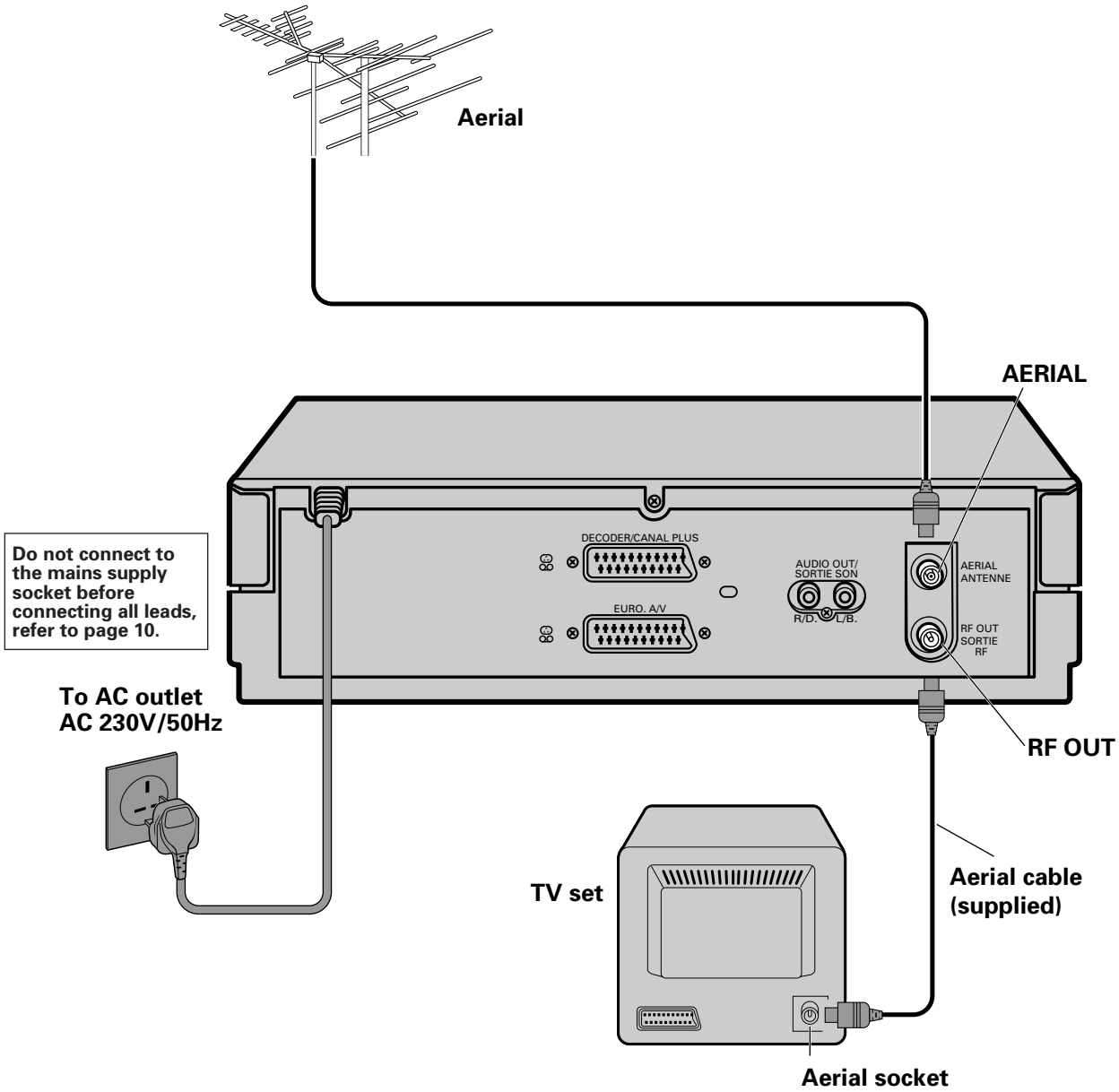
The clock display area in the VCR's display panel will look like "––:––" until you set the 24-hour clock. The clock must be set to the correct time before you can programme the VCR for timer recording.
This section explains the two clock setting methods.
A. Setting the VCR's clock automatically using a PDC signal.
B. Setting the VCR's clock on the TV screen.

Cassette Tapes Page 20

This tells you how to insert and remove a cassette, and how to protect recordings from accidental erasure.

CONNECTION

Basic Method



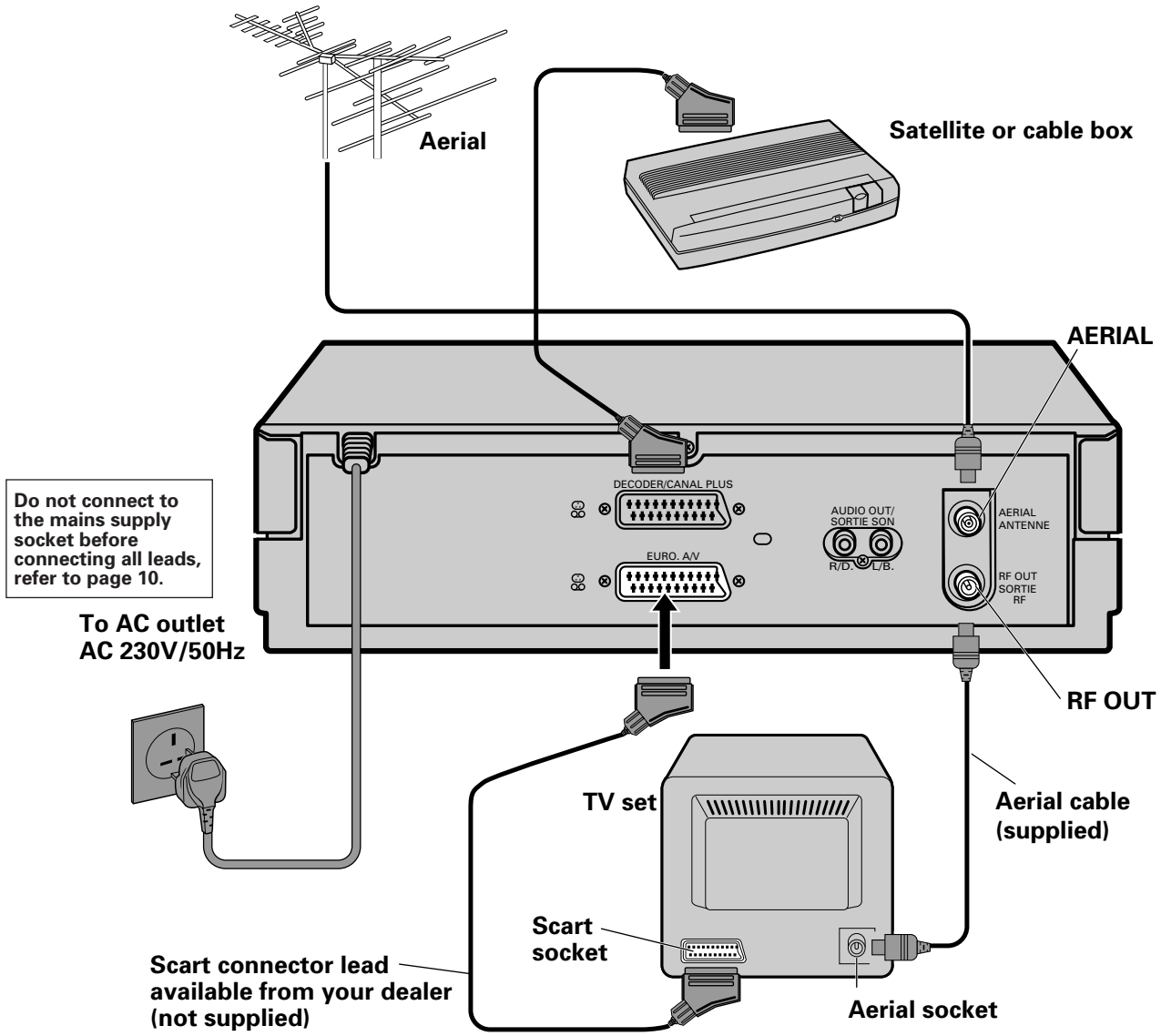
For even better sound and picture quality we recommend to use scart connection.
Please refer page 7 for scart connection.

PRECAUTIONS

On Installation

- Do not install the unit near heat sources such as radiators or air ducts or in a place subject to direct sunlight, excessive dust, mechanical vibrations or shocks.
- Never bring a magnet or magnetized object near the VCR because it will adversely affect the performance of the VCR.
- Ensure the VCR is installed on a flat surface.
  The unit is designed for operation in a horizontal position.

Connecting your VCR to your television using a scart lead



Set your TV to its proper AV line (scart lead) to receive signal via the scart connector lead. This connection will improve the picture and sound quality.

Make sure the VCR indicator lights in the VCR display to feed the audio and video signals from the VCR to TV. If not, press the VCR/TV button on the handset to display it.

This connection also allows you to record the TV programme selected on the TV. To do this, press the AUX button on the remote control handset to display the "L1" indicator in the VCR's display instead of a VCR programme number.

On Operation

- Moisture condensation
  Moisture condensation on the cylinder, one of the most crucial parts of the VCR, will cause damage to the tape.
  The VCR should not be operated for at least 2 hours after being moved from a cold to a hot environment to avoid condensation from occurring on the cylinder.

On Cleaning

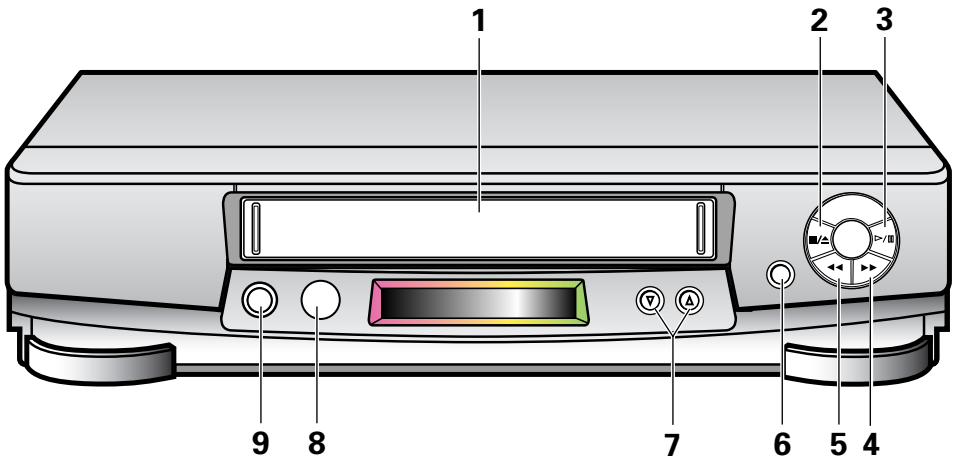
- DO NOT use volatile agents such as benzine, alcohol, thinner, or chemically processed cloth to wipe the surface of the VCR case. These agents may cause the surface finish to deteriorate or peel off.

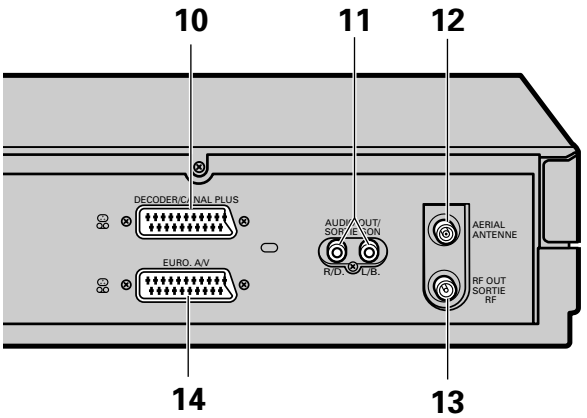
On Repacking

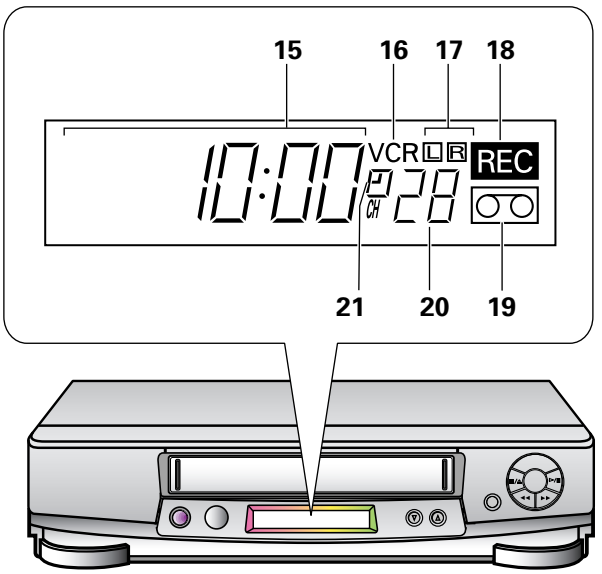
- It is wise for you to save the packing materials and box in case you ever need to ship or store your unit.

CUSTOMER CONTROLS

VCR Customer Controls

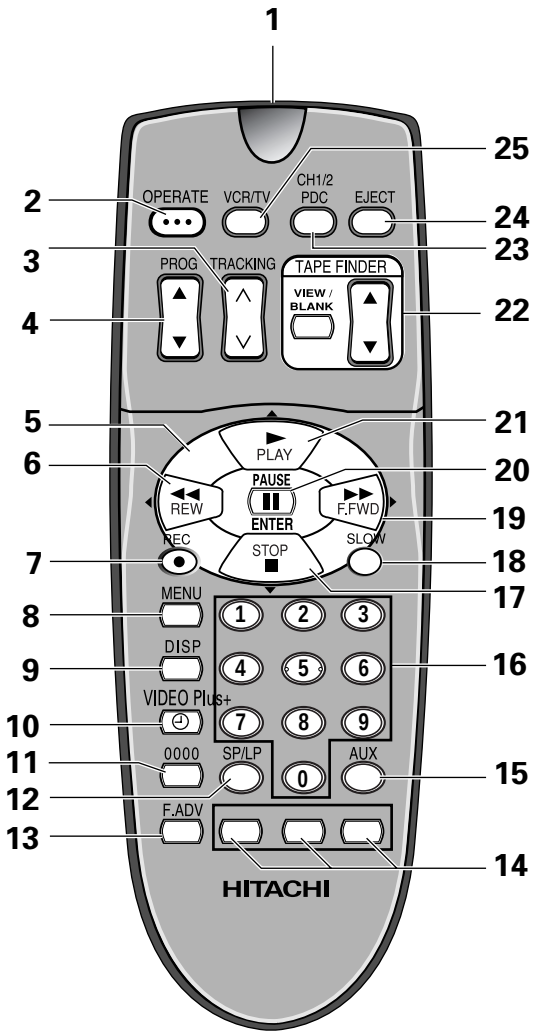






Item No.	Function	Page
1	Cassette compartment	20
2	STOP/EJECT button	24
3	PLAY/STILL button	22
4	FAST FORWARD button	23
5	REWIND button	23
6	REC button	26
7	PROG (programme up/down) buttons	11
8	Remote control receiving window	9
9	OPERATE (Operate/Standby) button	2
10	Decoder socket	47
11	AUDIO OUT (L), (R) sockets for stereo system connection	—
12	AERIAL — signal input	6
13	RF OUT — signal out to TV	6
14	Scart socket	7
	VCR Display	
15	Time,	19
	Time counter or	39
	VCR mode indicator	22
	PLAY — playback ["–" appears during reverse direction viewing]	22
	SRCH— visual search	23
	SLOW— slow play	22
	REW — rewind	23
	S:REW—high speed rewind	23
	FF — fast forward	23
	S:FF — high speed fast forward	23
	STILL— play pause and frame advance	22
16	VCR, operate mode	22
17	Audio indicators	25
18	REC — record (flashes during record pause)	26
19	Tape-in indicator	20
20	TV programme number or Auxiliary (L1/L2)	26 45
21	Timer indicator	29

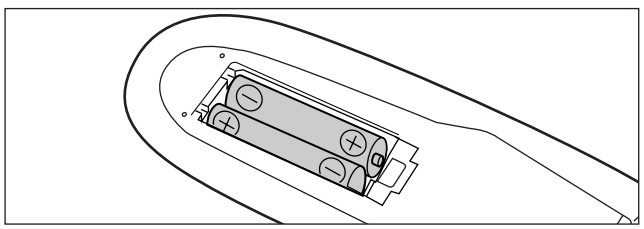
Remote Control Handset Customer Controls



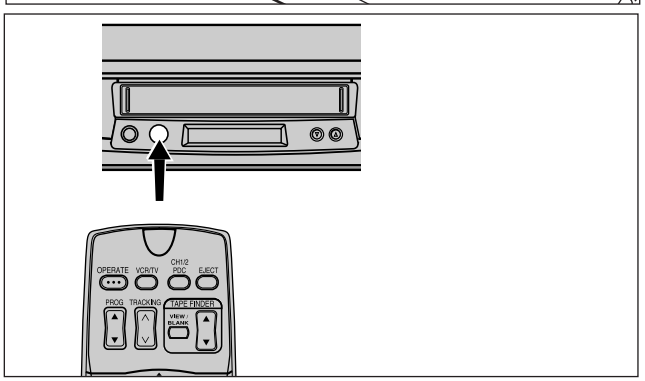
Item No.	Function	Page
1	Transmission window	9
2	OPERATE — switch between operate and standby mode	29
3	TRACKING button	25
4	PROG (programme up ▲ /down ▼) button	12
5	These cursor buttons not used.	—
6	REW — rewind or search	23
7	REC — record button	26
8	MENU — to recall OSD menu	42
9	DISP — to recall on-screen display, change VCR's display	43
10	VIDEO Plus+ — VIDEO Plus+ programming	30
11	0000 — to correct an incorrect digit, reset the time counter when it appears in the VCR's display	19 39
12	SP/LP — changes tape speed during record	20
13	F. ADV button — advance the picture by one frame during still playback	22
14	These buttons not used.	—
15	AUX button — select L1 or L2 input	45
16	Number buttons	19
17	STOP — stops play/record function	24
18	SLOW button— press during playback	22
19	F.FWD — fast forward or search	23
20	PAUSE — pause or still	22
21	PLAY — playback	22
22	TAPE FINDER button used for Index Search, Easy View and Blank search function	40
23	CH1/2 button — for audio channel selection in playback	25
	PDC button — for PDC setting during recording	55
24	EJECT button — press to eject a cassette	20
25	VCR/TV select button	22

REMOTE OPERATION

Power source of infrared remote control handset



The infrared remote control handset is powered by two batteries (size IEC standard R6). The life of the batteries is about a year although this depends on the number of times the handset is used.
Replace the batteries when operation is not possible or when the operating distance becomes too small.
Note: When replacing the batteries, remove the used batteries and press the OPERATE button and hold it pressed for 10 seconds, then insert the new batteries and replace the battery cover.



Remote operations

To operate this VCR with the remote control handset, point the remote control handset at the receiver on the front of the VCR.

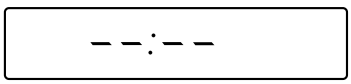
AUTO INSTALLATION FUNCTION

Auto Install (Plug & Play) function

This automatically tunes all broadcast channels, sets the clock and date.

VCR **TV screen**

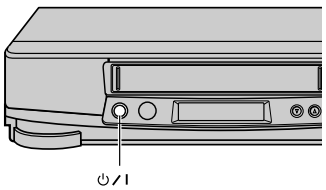
1

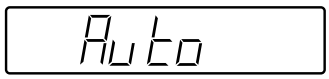


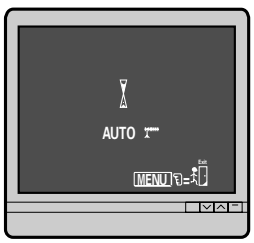
Switch on at the mains power supply after completely connecting all leads (as described on pages 6 and 7).

The VCR will be in the standby mode at this stage and the VCR display will show "– –:– –".

2





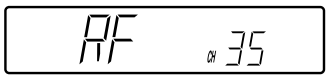


Press OPERATE button.

" Auto" will appear in the VCR display.

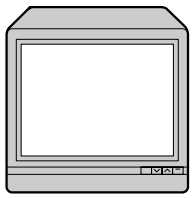
During this time, if your set-up include scart connector and the TV is set to AV line, the TV screen will display as shown.

3



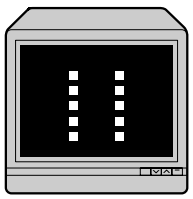
After this process is complete, the RF output channel will appear in the VCR display.
For example, RF output channel 35.

4



Switch on your TV and select an unused programme number, i.e. one not used for BBC1, ITV, etc. (Please consult your TV instruction manual as your TV may have a special VCR programme number which must be used.)
Note: This programme number will be your VCR programme number from now on.

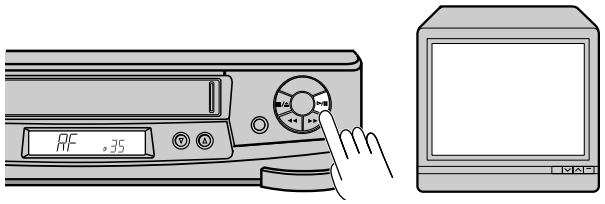
5



Tune your TV (consult your TV instruction manual) until the test pattern shown appears.
The correct tuning position is when the picture is clear. Ensure this programme is stored in your TV.

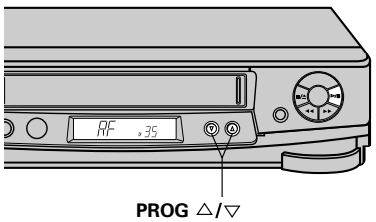
VCR TV

6

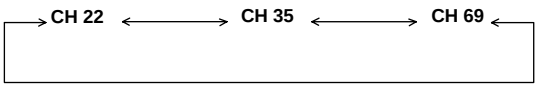


Press the PLAY/STILL button.
Note: If the VCR displays " RF CH - - " press the STOP button on the remote control or on the VCR. The RF channel data will appear in VCR display. Press the PROG button to change the RF channel to RF CH 35. To stop the RF output, press STOP button on remote control or on the VCR again.

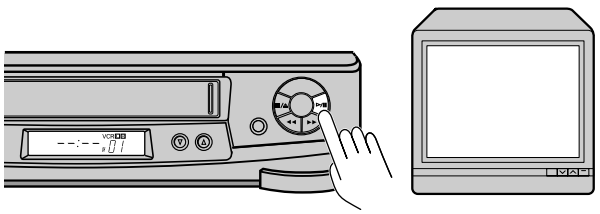
7



If you cannot tune your TV correctly to the test signal, or there is distortion in the signal, it may be necessary to change the VCR's RF out channel. In this case, press the PROG select button (△ or ▽) on the VCR to change the VCR's RF channel. Then re-tune your TV. If the test signal has not improved, continue to change the VCR's RF channel and re-tune your TV each time, until a clear test pattern received.
VCR's RF channel will change as follows:

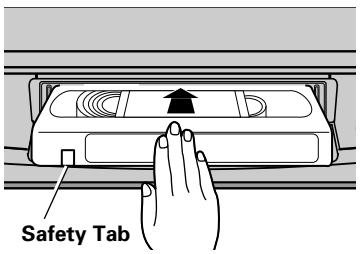


8



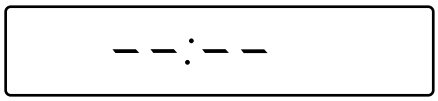
Press the PLAY/STILL button again. The test pattern will disappear and the VCR will now come out of the standby mode into the operate mode.

9



You should now be able to playback a prerecorded cassette.
Insert the cassette carefully (see page 20 for CASSETTE TAPES). If the safety tab is removed, then playback will start immediately, if not press the PLAY/STILL button and the picture will appear on the screen.

PRE-TUNING OF BUILT-IN TV TUNER



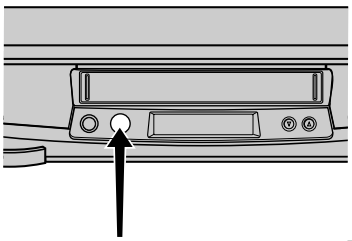
The VCR should display "– –:– –" in it's LCD panel after the main supply is connected.

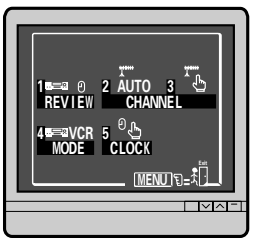
Controls **TV Screen**

1

Turn on the TV and the VCR, then tune the TV to the video programme number.
If you connect the VCR and TV using a 21-pin Scart connector lead, select the 21-pin Scart input of the TV.

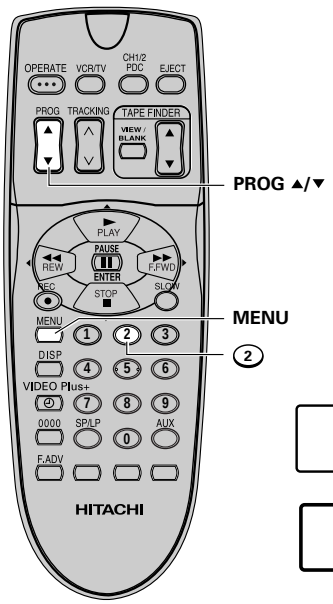
2

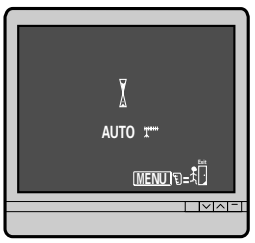




Press the MENU button.
The menu, as illustrated, appears on the TV screen.

3

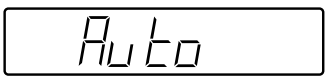


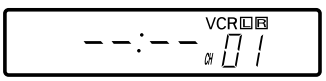


Press the ② button.
The display, as illustrated, appears on the TV screen and " Auto " appears in the VCR display. The VCR will automatically store channels received in your area. It takes about 3 minutes. The following stations are stored in programme numbers 01 — 05 automatically.

01 BBC1
02 BBC2
03 ITV
04 CH4 (or S4C)
05 CH5

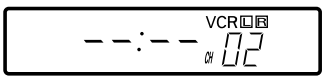
Note: If the station does not transmit a signal which identifies itself, the station name will not appear.





You can watch the progress on the TV's screen — when the channel numbers stop changing, pre-tuning is complete.

4



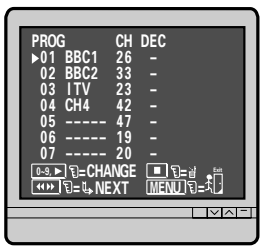
Press the PROG ▲ / ▼ button to check the channels you can receive.
Note: If no channels have been set or a clear picture does not appear, check the aerial or Scart connection.

Note: When the pre-tuning of a channel is completed, the current time may appear in the VCR's display. This is because the auto clock setting function has operated and the VCR's clock has been set automatically. (See page 18 for details.)

Deleting Unwanted Preset Channels

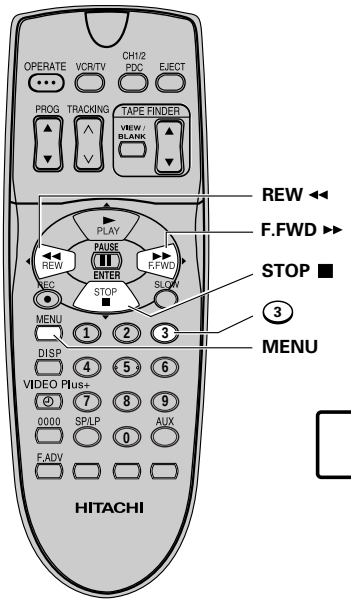
Controls **TV Screen**

1



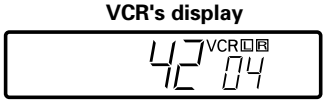
Press the MENU button, and then button ③ .
The programme number, station name and channel number will appear in this display.
This is indicated by an arrow on the left of the screen.
Note: If the station does not transmit a signal which identifies itself, the station name will not appear.

2

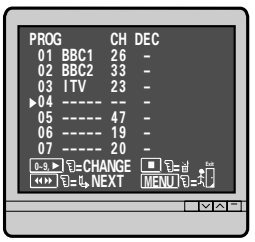


Press the F.FWD ▸▸ or REW ◂◂ button until an unwanted channel is found.
For example, press the F.FWD ▸▸ button to select channel 42 (programme number 04).
This is indicated by an arrow on the left of the screen.

VCR's display



3



Press the STOP ■ button.
The channel number changes to "- -", indicating that the channel has been deleted.

4

Repeat steps 2 and 3 until all unwanted channels have been erased.

5

After deleting them, **press the MENU button**.

(PRE-TUNING OF BUILT-IN TV TUNER)

Fine tuning of the picture of the received channel:

Controls **TV Screen**

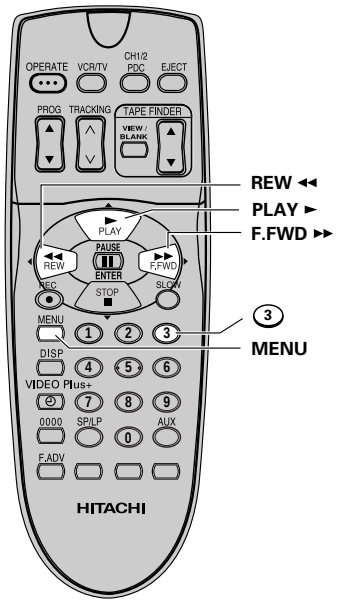
1

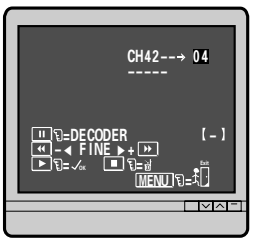
Press the MENU button, and then button ③ .

2

Press the F.FWD ▸▸ or REW ◂◂ button to tune to select the channel with a poor picture.
For example, press the F.FWD ▸▸ button to select channel 42 (programme number 04).

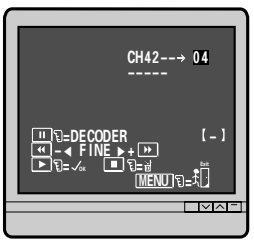
3





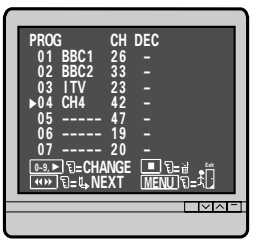
Press the PLAY ▸ button twice.

4



Press the F.FWD ▸▸ or REW ◂◂ button to adjust the picture so it appears clearly.

5



After fine tuning for the best picture **press the PLAY ▸ button** to store the channel.

6

Repeat steps 2 through 5 for other channels.

7

After fine tuning them, **press the MENU button**.

To change the channel number manually

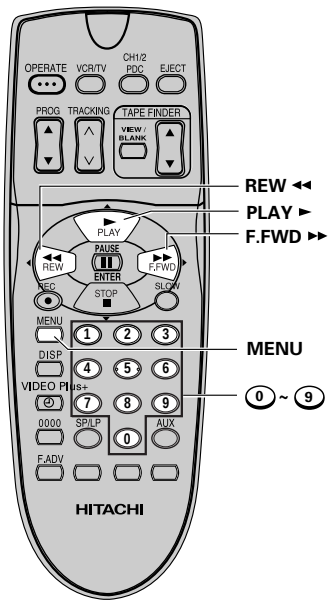
You may do this if you have accidentally deleted a channel or particular channel was not found.

Controls | **TV Screen**

1

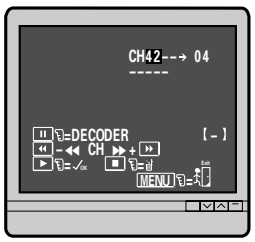
Press the MENU button, and then button ③.

2



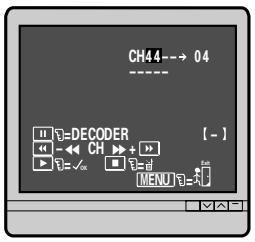
Press the F.FWD ▶▶ or REW ◀◀ button to display the channel to be changed on the VCR's display. For example, press the F.FWD ▶▶ button to select channel 42 (programme number 04).
This is indicated by an arrow on the left of the screen.

3



Press the PLAY ▶ button.

4



Press the F.FWD ▶▶ or REW ◀◀ button to start searching for the broadcast TV channel you want.
F.FWD ▶▶: Searches from low frequency to high frequency.
REW ◀◀: Searches in the reverse order.
At a channel that is broadcasting, a picture appears on the TV screen. Press the PLAY button twice to store the channel. If a channel that is not required appears on the TV screen, press the F.FWD ▶▶ or REW ◀◀ button again.

(PRE-TUNING OF BUILT-IN TV TUNER)

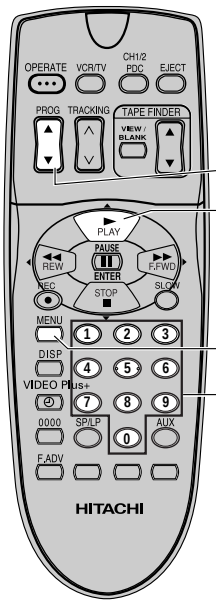
To change the programme number.

Controls **TV Screen**

1

Press the MENU button, and then button ③.

2



PROG ▲/▼

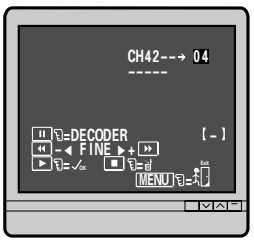
PLAY ►

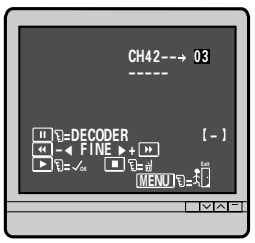
Press the F.FWD ▶▶ or REW ◀◀ button to display the programme to be changed on the VCR's display.
For example, press F.FWD ▶▶ to select programme number 04 (channel 42).
This is indicated by an arrow on the left of the screen.

3

MENU

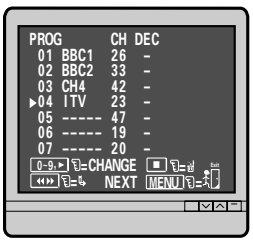
⓪ ~ ⑨





Press the PLAY ► button twice so the programme number is selected, then press two number or PROG▲ /▼ button to display the desired programme number.
For example, button ⓪ and ③.

4



After entering the programme number, **press the PLAY ► button** to store it.

5

To end, **press the MENU button**.

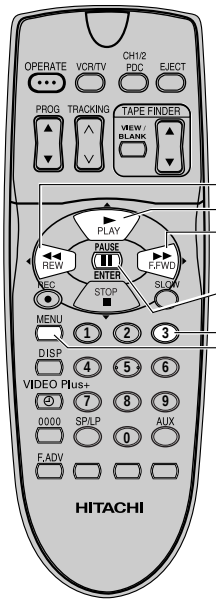
To preset "satellite or cable box" programme (Refer to page 7 for installation) :

Controls **TV Screen**

1

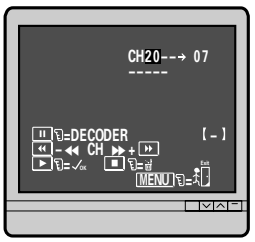
Press the MENU button, and then button ③ .

2



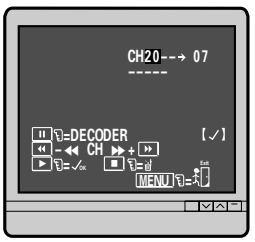
Press the F.FWD ▸▸ or REW ◂◂ button to display the programme.

3



If the picture displayed is a “satellite or cable box" programme, **press the PLAY ► button.**

4



Press the PAUSE (II) button to change the display from "DECODER (—)" to "DECODER (√)".

5

Press the PLAY ► button twice to store the programme.
The DEC "—" display changes to "√", indicating that the channel has been stored.

6

To end, **press the MENU button.**

AUTO CLOCK SETTING USING PDC SIGNAL

Setting the clock using a PDC signal (Auto clock set)

This function engages when "AUTO clock √ (on)" is specified on the VCR MODE setting screen. To release this function, specified "AUTO clock — (off)".

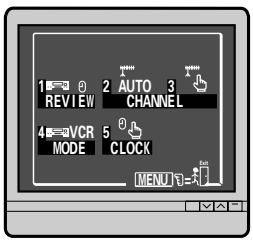
To switch auto clock between set on or off;

Controls **TV Screen**

1

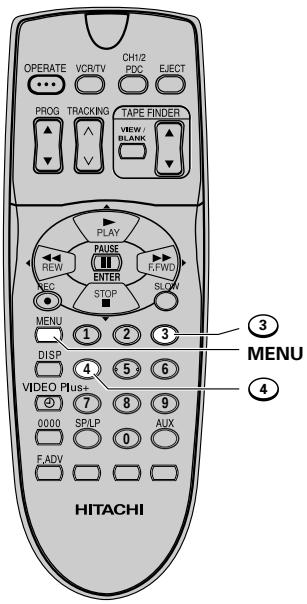
Turn the VCR and TV on, then tune the TV to the video programmer number.

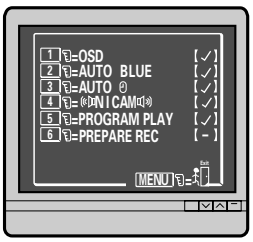
2



Press the MENU button.

3





Press the ④ button for VCR MODE.

Then press the ③ button to change the auto clock setting.

Notes:

- If the PDC signal being broadcast by a station does not contain a time signal, the VCR's clock will not be set automatically by pre-tuning the VCR to the channel. In this case, use the procedure on page 19 to set the clock manually.
- The time which has been set automatically may drift from the correct time depending on the signal condition or the programme being broadcast. In this case, use the procedure on page 19 to set the VCR's clock manually.
- If the VCR's clock has already been set manually, the function to set the clock using a PDC signal is disabled automatically.

SETTING THE CLOCK MANUALLY

Things to know before starting

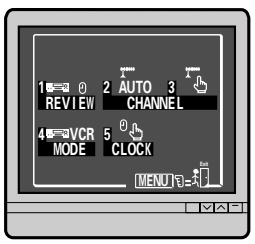
- Turn the VCR and TV on, then set the TV to the video programme number.
- While you are setting the clock, the display on the TV screen will prompt you through the procedure.
- Always press ⓪ **before** a single-digit hour, minute, day, month or year.
- If you press the wrong digit during clock setting, press the 0000 button repeatedly until the incorrect digit changes to "–", then enter the correct digit.
- The clock must be set to the correct time before programming the timer for unattended recording.

Controls **TV Screen**

1

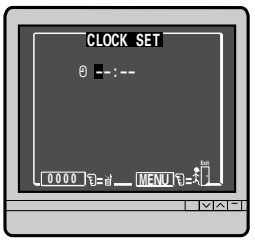
Turn the VCR and TV on, then tune the TV to the video programme number.

2



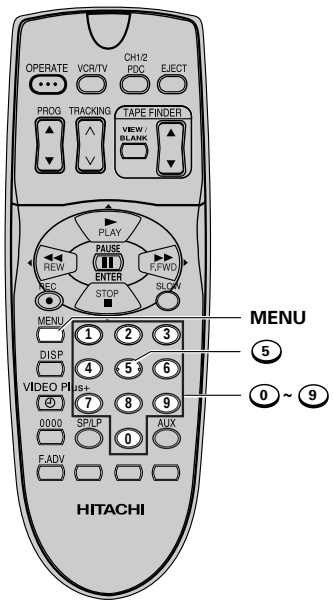
Press the MENU button.

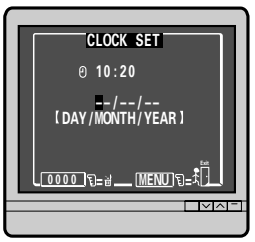
3



Press the ⑤ button for clock setting.

4

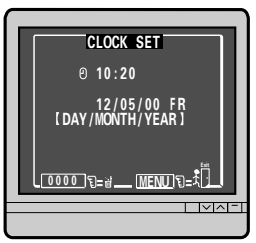




Set the time.

For example, press ① ⓪ ② ⓪ for 10:20. (0:00 for midnight, 12:00 for noon)

5



Set the date.

For example, press ① ② ⓪ ⑤ ⓪ ⓪ for the 12th of May, 2000.

The day of the week appears automatically.

6

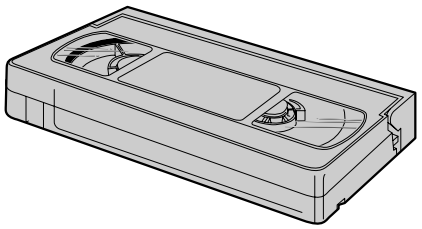
After setting the date, press the MENU button.

The clock appears in the display of VCR.

Notes:

- If you wish to correct the time in the VCR's display, after setting the clock time and date, perform steps 1 through 5 to correct the time and date, again.
- If the power is interrupted for more than 30 minutes, "– –:– –" will appear in the VCR's display and the time and date will need to be reset.

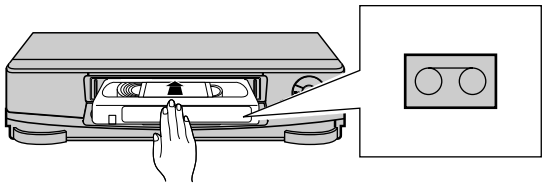
CASSETTE TAPES



Only use video cassettes with the VHS mark in this VCR.

Insertion

1

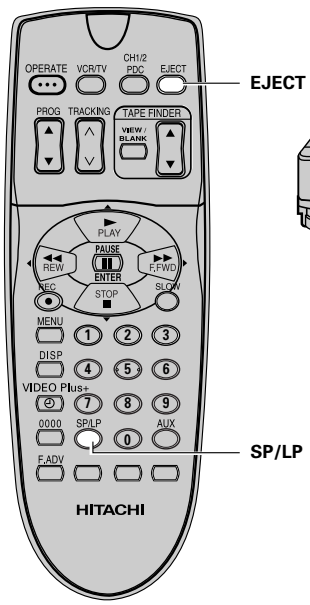


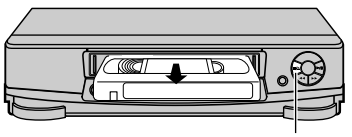
Push the cassette through the door until the VCR mechanism pulls it into the compartment.

The VCR automatically turns on and the indicator turns on when the cassette is in place.

Removal

1





Press the STOP/EJECT button on the VCR or the **EJECT** button on the remote control handset. The cassette will come partially out of the compartment so you can pull it out.

- The indicator turns off when the cassette is ejected.
- The cassette can be ejected with operate on or off.

Remember that:

—The VCR automatically enters the playback mode when a cassette without its safety tab is inserted.

—When you press the REC button and a cassette without the safety tab is inserted, " TAb " will flash in the VCR display for several seconds and the cassette will be ejected automatically.

—Be sure to check the safety tab before inserting a cassette for the above reasons.

Type of video cassette

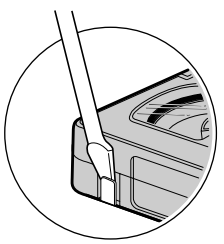
The table below shows the recording time of different cassettes.

TYPE	SPEED SELECT SWITCH	
	SP	LP
E-30	30 minutes	60 minutes
E-60	60 minutes	120 minutes
E-120	120 minutes	240 minutes
E-180	180 minutes	360 minutes
E-240	240 minutes	480 minutes

- Press the SP/LP button on the remote control handset to select the recording speed before recording. It is set to the correct speed automatically during play, so it is not necessary to change it over.
- It is recommended to record in the SP mode for higher quality picture and sound.

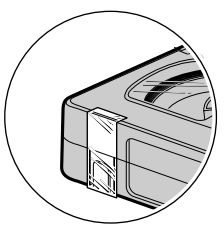
To avoid erasing a recording

Break off the safety tab using a screwdriver or similar tool.



To re-record on a cassette which has its safety tab removed

Cover the hole with cellophane tape.



Section-2 Basic Operations

Playback Pages 22 — 25

This tells you how to playback a recorded tape and how to view a scene at variable tape speeds.

Recording TV Programmes Pages 26— 28

This tells you how to record a TV programme while viewing the same TV programme or while viewing another TV programme.

Timer Recording Pages 29— 36

The built-in 24-hour timer permits unattended recording of up to 8 preselected programmes within a period of 1 year, including daily and weekly programmes.
In additional to the conventional timer programming procedure, this VCR incorporates a new programming procedure called VIDEO Plus+.

Prepare Recording Using Satellite Decoder Page 37

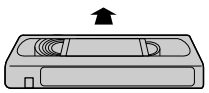
Prepare Rec function allows you to easily prepare the VCR to record signals from a satellite/cable decoder.

PLAYBACK

Start point: Turn the TV set on and select the video programme number.

Controls **VCR's Display**

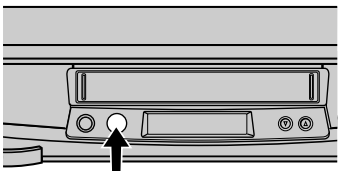
1

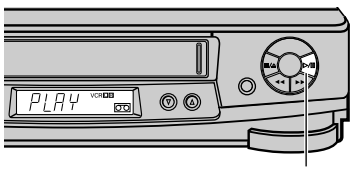


Insert a cassette.

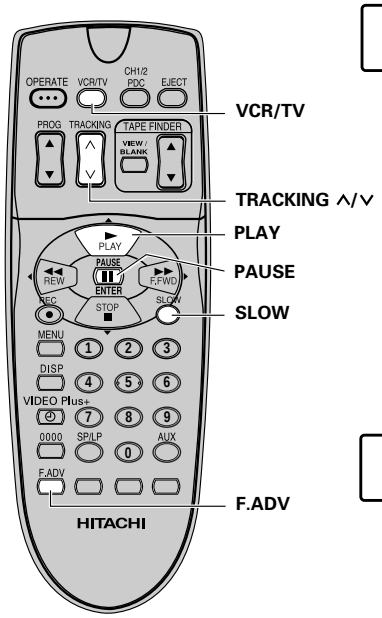
Note: When a cassette with its safety tab snapped off is loaded, playback starts automatically.

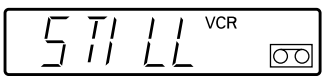
2





Press the PLAY button on the remote control unit or PLAY/STILL button on the VCR.
Press the VCR/TV button on the remote control. The letter "VCR" will appear in the display. This is necessary for viewing the picture through the scart connection.
Note: When you press the PLAY button and a cassette has not been inserted, the "TAPE" will flash in the VCR display to warn you.





During playback you can use the following features.

Pause playback

Press the PAUSE button on the remote control or PLAY/STILL button on the VCR to stop the picture on the screen during playback.
Press the button again to reset to normal playback.

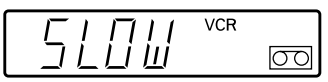
If the screen "jitters" vertically, this can be improved by pressing the TRACKING ∧ / ∨ button.

Frame advance

Press the PAUSE button to still the picture.

Press the F. ADV button to advance the picture to the next frame during still playback.

Pressing and holding the **F. ADV** button advances the frames continuously.



Slow function

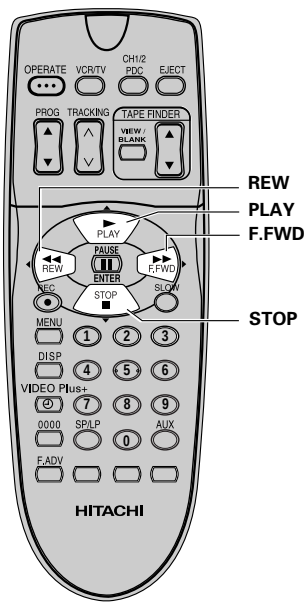
Press the SLOW button during playback.

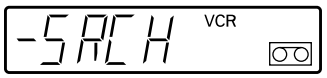
Press the SLOW button on the remote control unit during playback to view slow playback picture.

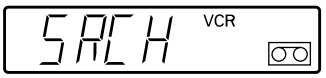
Press the SLOW or PLAY button again to reset to normal playback.

Note: When the slow playback mode continues for about 1 minute, the VCR switches to stop mode automatically to prevent damage to the tape.

Controls **VCR's Display**



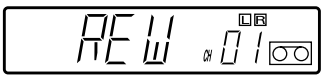


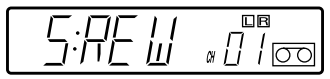


Visual search

Press either the REW or F.FWD button during playback.
Pictures can be viewed at high speed in either the forward or reverse direction. Press the button again (or press the PLAY button) to return to normal speed playback.

Notes:
- The playback picture will have some horizontal noise bars during visual search.
- These noise bars may be much more noticeable with tapes recorded in the LP mode.





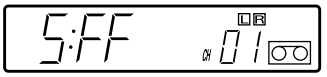
Rewinding a tape during stop mode.

Press the REW button.
Note: When a cassette has not been inserted, the "TAPE" will flash in the VCR display to warn you.

Rewinding a tape at high speed:

Press the REW button, then press it again.
To stop the tape, press the STOP button.

Note: During super rewind, there will be an interval of 5 seconds between the time the STOP/EJECT button is pressed and the tape actually stops. This is designed to protect the tape.

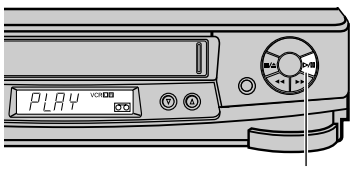


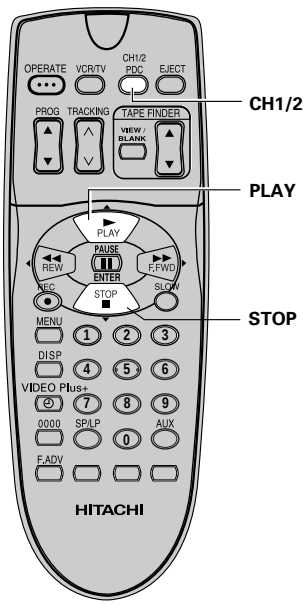
Fast forwarding a tape during stop mode.

Press the F.FWD button.
Note: When a cassette has not been inserted, the "TAPE" will flash in the VCR display to warn you.

Fast forwarding a tape at high speed:

Press the F.FWD button, then press it again.
To stop the tape, press the STOP button.





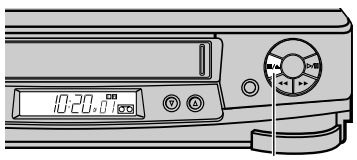
Playing a NTSC tape.

Note: NTSC is different picture format, used in North America.

If your TV has a PAL 60 system mode, you can play a NTSC tape on the TV.
Insert a NTSC tape into the VCR and press the PLAY button.

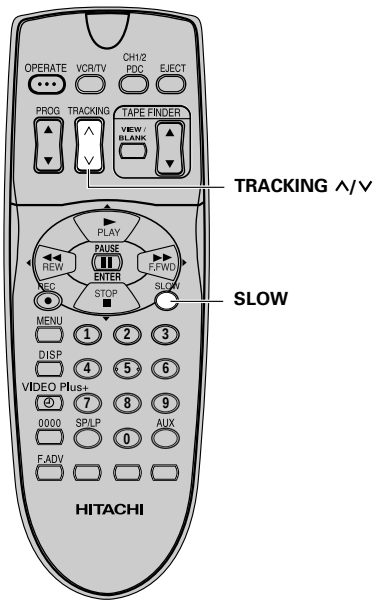
Note: Although this VCR can play both NTSC-SP and EP tapes, the Hi-Fi sound in NTSC-EP tapes may be noisy. In this case, press the CH1/2 button to switch off the L and R indicators so the linear sound mode is engaged.

3



Press either the STOP or STOP/EJECT button to stop a tape.

Note: The quality of the playback picture in the LP still/search/slow/frame advance modes is slightly inferior and jitter (shaking), skew and/or disappearance of colour may occur and with some TVs, the picture also be vertically unstable.



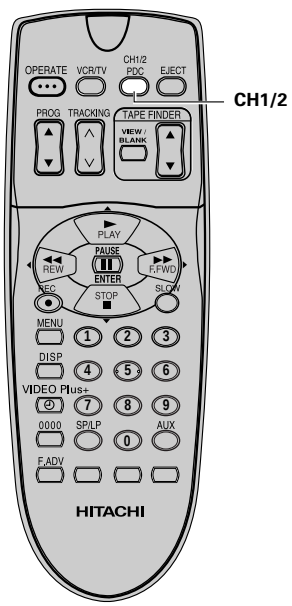
Notes:

- If there is a noise bar in the picture during still or slow motion play, press the SLOW button and then press the TRACKING ∧ / ∨ button until the noise is reduced.
- To prevent tape damage, the VCR will switch from the still/slow mode to the stop mode after about 1 minute.

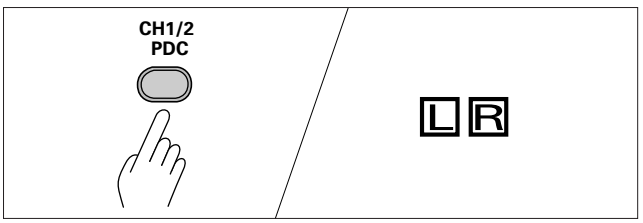
Auto Tracking

When playback is started, the auto tracking function operates and adjusts tracking automatically so the picture is optimized.

- Auto tracking may not operate correctly when the tape is scratched or the recorded condition is poor. In this case, press the TRACKING (∧ / ∨) button to adjust tracking.



CH1/2 select button



■ When playing stereo or monoaural tapes

Press the CH1/2 select button on the remote control handset so that both the L and R indicators on the front panel of the VCR lights up.

- When only the L (or R) indicator lights, only the left (or right) audio channel of the Hi-Fi track is heard.
- When both L and R indicators do not light, the sound on the mono audio track is heard.

■ When playing back bilingual broadcasts

Select the required language by pressing the CH1/2 select button.

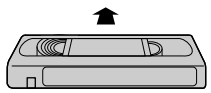
- When only the L indicator lights, the main language is heard.
- When only the R indicator lights, the sub language is heard.
- When both L and R indicators light, the main language and sub language are heard.
- When both L or R indicators do not light, the mono audio track is heard.

RECORDING TV PROGRAMMES

Start point: Turn the TV set on and select the video programme number.

Controls **VCR's Display**

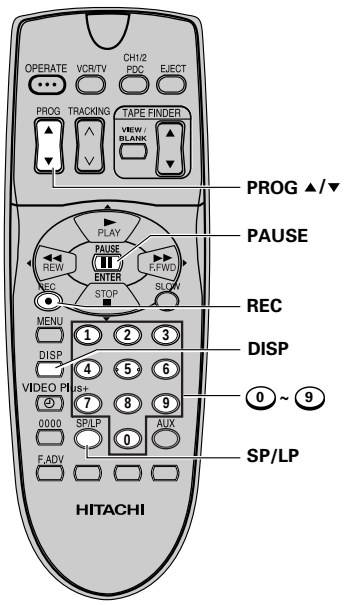
1

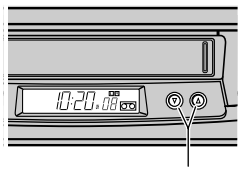


Insert a cassette.

Note: Be sure to check that the safety tab is not missing. If it is removed, the VCR is set to the playback mode automatically.

2

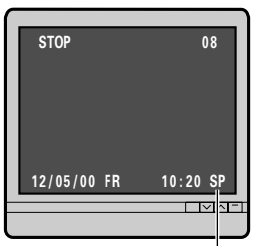




Select the programme to be recorded by pressing the PROG ▲/▼ button or two number buttons.

See the "NICAM" display on page 44 and the table on page 28 for NICAM.

3

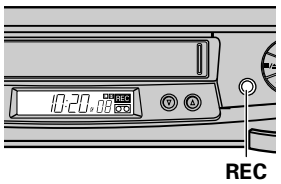


Press the DISP button.
The on-screen display will appear on the TV screen.

4

Press the SP/LP button to select the recording speed (SP or LP).

5



Press the REC button.

Now, recording starts.

Notes:

- When a cassette without a safety tab is inserted, " TAb " will flash in the VCR display for several seconds and the cassette will be ejected automatically.
- When you press the REC button and a cassette has not been inserted, the " TAPE " will flash in the VCR display to warn you.

6

If you want to avoid recording unwanted material, **press the PAUSE button.** Press the button again to continue recording.

To prevent tape damage, the VCR will automatically switch from record/pause to the stop mode after about 5 minutes.

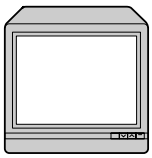
Controls **VCR's display**

7

To view a programme while recording it

You can view a programme while recording it by selecting the video programme number on your TV.

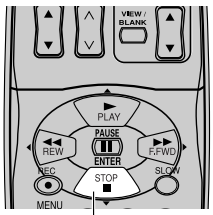
8



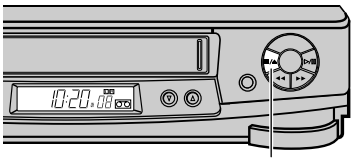
To record one programme while viewing another

You can record one programme while viewing another by selecting the programme you want to view on your TV. The recorded programme can be viewed later at your convenience.

9



STOP



STOP/EJECT

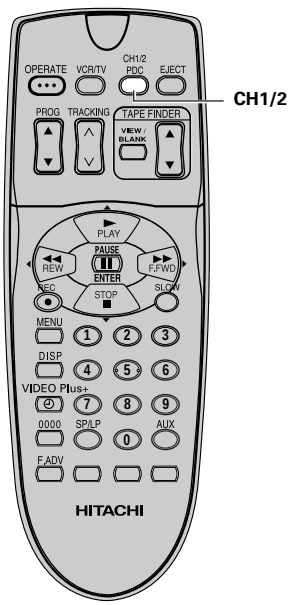
After the recording has been made **press the STOP or STOP/EJECT button.**

Recording a stereo broadcast

The basic procedure for recording a stereo broadcast is the same as it is for normal recording. The STEREO indicator will appear on the TV screen for a few seconds if a programme being broadcast in stereo is selected.

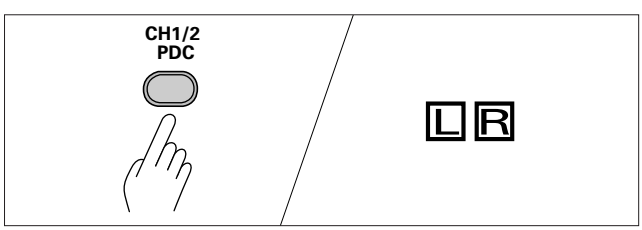
Recording a bilingual broadcast

The basic procedure for recording a bilingual programme is the same as it is for normal recording.
The M1 M2 (bilingual) indicator will appear on the TV screen if a station broadcasting a bilingual programme is selected.



CH1/2

Note: You can monitor the desired audio channel with the CH1/2 select button on the remote control handset. Press the CH1/2 select button until you hear the desired audio channel. The selected audio channel is shown on the VCR. During bilingual broadcasts L is the main language and R is the foreign language.



Audio to be recorded according to the NICAM broadcast

Type of broadcasting audio	Display on TV screen	NICAM (√) or (—) display (see page 44)	Audio to be recorded		
			Mono audio track	Hi-Fi audio track	
				L	R
Standard		Either	Standard	Standard	Standard
Standard + NICAM mono	M1	√ (on)	Standard	NICAM mono	NICAM mono
		— (off)	Standard	Standard	Standard
Standard + NICAM stereo	STEREO	√ (on)	Standard	NICAM L	NICAM R
		— (off)	Standard	Standard	Standard
Standard + NICAM bilingual	M1 M2	√ (on)	Standard	NICAM main	NICAM sub
		— (off)	Standard	Standard	Standard

TIMER RECORDING

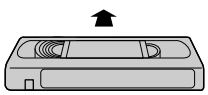
Your TV does not have to be on to make a recording because the VCR records TV programmes without the aid of your TV. It is only used for monitoring.

Controls **VCR's Display**

1

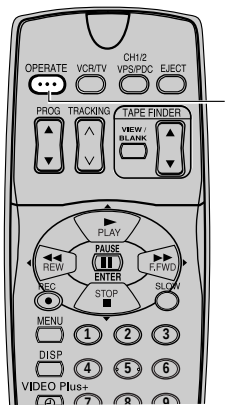
Make sure that the clock shows the present time correctly.

2



Insert a cassette.
Be sure a cassettee which has an intact safety tab must be inserted.

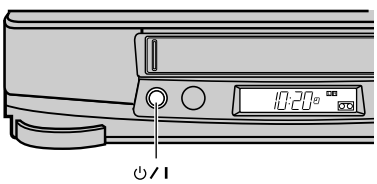
3



OPERATE

Programme the timer.
See pages 30 to 36 for details.

4



Press the OPERATE button to turn the VCR off.

To interrupt a recording after it starts, press the OPERATE button and then the STOP or STOP/ EJECT button within 10 seconds.

If a cassette with its safety tab snapped off is inserted, it will be ejected automatically and the indicator ⏍ in the VCR's display will start flashing when the VCR is turned off. In this case, insert a cassette with its safety tab in place or cover the hole with plastic tape.

Also, if a cassette is not loaded in the VCR, the indicator ⏍ starts flashing.

(TIMER RECORDING)

Programming the timer

This VCR incorporates two programming procedures for timer recording.
One is conventional, whereby the TV programme No., start time, stop time, recording date, etc., must be input, and the other is called VIDEO Plus+ whereby up to 9 digits must be input.

Programming the timer using VIDEO Plus+ programming system

Things to know before starting programming

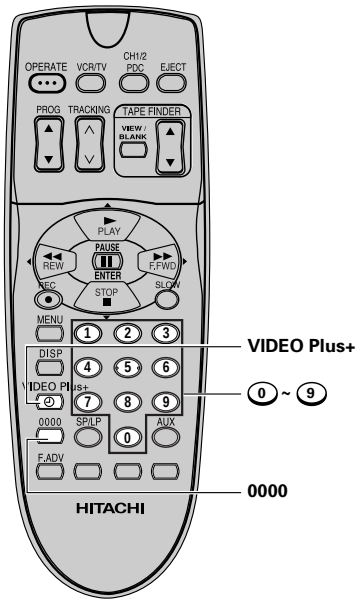
- Turn the VCR and TV on, then set the TV to the video programme number.
- While you are programming the timer, the display on the TV screen will prompt you through the procedure.
- To find the PlusCode number, look in the TV section of most newspapers or TV guide magazines.
- Check that the time and date are correct.

Controls **TV Screen**

1

Turn the VCR and TV on, then set the TV to the video programme number.

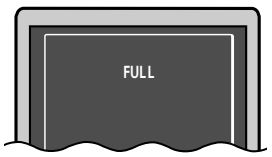
2



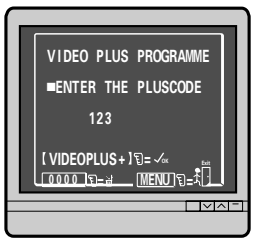
Press the VIDEO Plus+ button.
The VIDEO PLUS PROGRAMME display appears on the TV screen.
Notes:

- If the clock has not been set, the CLOCK SET display will appear.
- If the VIDEO Plus+ button is pressed when all the programme numbers that the VCR can store are occupied, a "FULL" indication will appear in the VCR's display and on the TV screen.

When the memory is full, and you wish to input further programmes, you must delete unwanted programmes from the VCR's memory.
Press the 0 button when the programme information you want to clear is displayed. Refer to page 36 for further information.

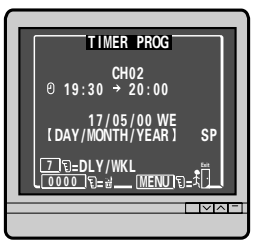


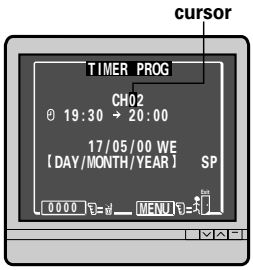
3



Enter the PlusCode programming number from the TV guide or newspaper etc. for the programme you want to record, by using the number buttons.

4

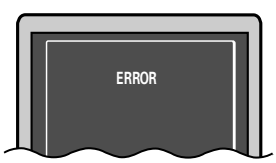




After entering the PlusCode number, **press the VIDEO Plus+ button.**

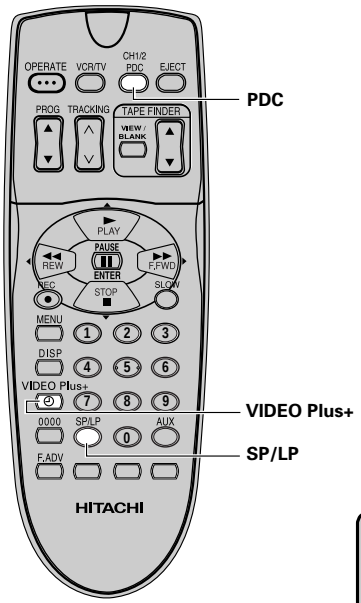
The programmed details appear.

Note: If you have entered a non-existing number, "ERROR" will appear on the TV screen.



If you wish to change the programme allocations, the start time or end time, press the 0000 button to display the cursor "■". Press the 0000 button repeatedly until the cursor reaches the digit you want to change, then enter the programme number, start time or end time.

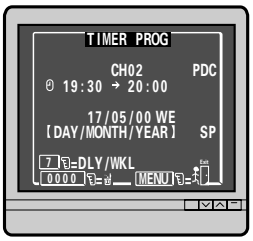
Controls **TV Screen**



Notes:

- If you change the TV programme number by the above procedure, the TV programme number will be automatically replaced by the new programme number in subsequent programming.
- Use of PlusCode numbers.
  PlusCode numbers only record programmes at the times shown in the TV guide.
  The VCR timer will not follow the TV programme if the time is changed for any reason (e.g. delayed due to a previous programme).
- If you intend to use the PDC function, press the PDC button to switch on the PDC function.
  The letter PDC will appear next to the channel number on the screen.
  For further information on PDC see page 55.

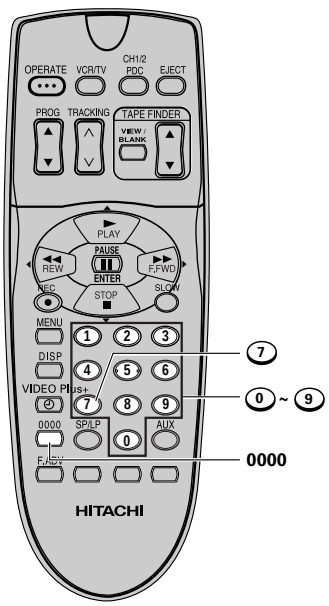
5

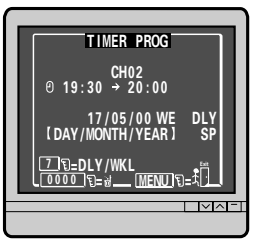


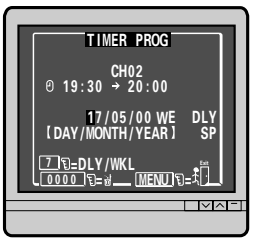
Press the SP/LP button to select the recording speed (SP, LP, or no display).
Note: If you select no display, the VCR will record at the speed displayed by the on-screen display. Check the recording speed after programming the timer. Press the SP/LP button to display the recording speed.

If you are programming the timer for one time recording only, skip step 6 and go straight to step 7.

6







To record at the same time every day of week

Press the ⑦ button once.

"DLY" will appear next to the date on the TV screen.

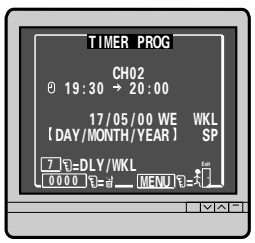
Note: When the ⑦ button is pressed twice, "DLY" will disappear and the screen will return to the programming mode for one-time recording.

If you want to change the first recording date, press the 0000 button repeatedly until the cursor reaches the first digit of day. (If the cursor passes the first digit of day, press the 0000 button repeatedly again until the cursor reaches the first digit of day.)

Then select the first recording date using the number buttons.

(TIMER RECORDING)

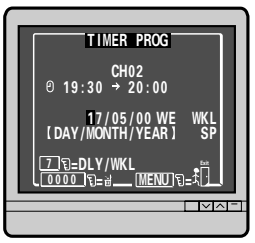
Controls **TV Screen**



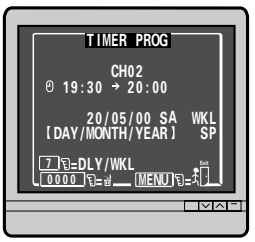
To record on a specified day at the same time each week

Press the ⑦ button twice.
"WKL" appears on the TV screen.

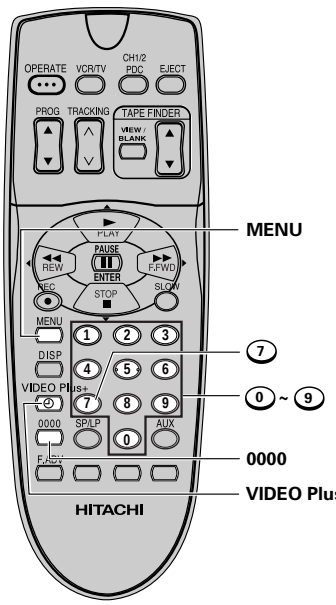
Note: When the ⑦ button is pressed again, "WKL" will disappear and the screen will return to the programming mode for one-time recording.



If you want to change the first recording date, press the 0000 button repeatedly until the cursor reaches the first digit of day. (If the cursor passes the first digit of day, press the button repeatedly again until the cursor reaches the first digit of day.)



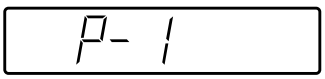
Then select the first recording date using the number buttons.



7

Press the MENU or VIDEO Plus+ button to end the programming.

VCR's display

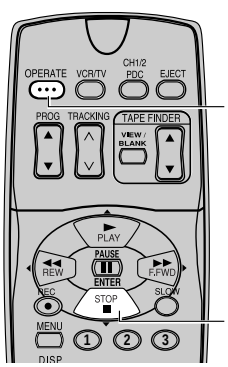


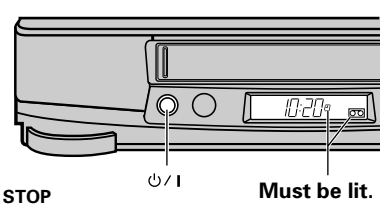
The VCR shows the timer programme number for a few seconds.

8

If you want to programme another event, repeat steps 2 to 7.

9





To activate the VCR's timer and make a recording at the preselected time, be sure to **press the OPERATE button to turn the VCR off**.
Of course a cassette which has an intact safety tab must be inserted.

To stop the timer recording press the OPERATE and then STOP button within 10 seconds.

Note: See page 36 for recalling and clearing the programming from the VCR memory and for programme priority.

Programming the timer without using VIDEO Plus+ programming system

Things to know before starting programming

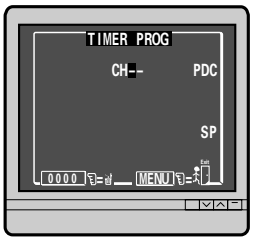
- Turn the VCR and TV on, then set the TV to the video programme number.
- While you are programming the timer, the display on the TV screen will prompt you through the procedure.
- Always press 0 before a single-digit programme number, hour and minute etc.
- You can correct an error in the programme any time before the last step by pressing the 0000 button repeatedly until the digit to be corrected changes to "–" and then enter the correct number.
- Check time and date are correct.

Controls **TV Screen**

1

Turn the VCR and TV on, then set TV to the video programme number.

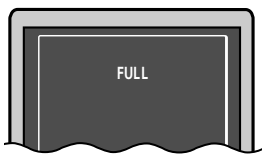
2



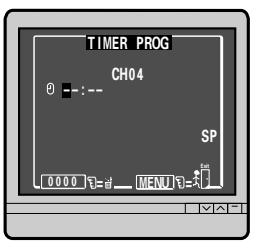
Press the VIDEO Plus+ button twice.

Notes:

- If the VIDEO Plus+ button is pressed when all the programme numbers that the VCR can store are occupied, a "FULL" indication will appear in the VCR's display and on the TV screen.
- If you intend to use the PDC function, press the PDC button to switch on the PDC function. The letter PDC will appear next to the channel number on the screen. For further information on PDC see page 55.

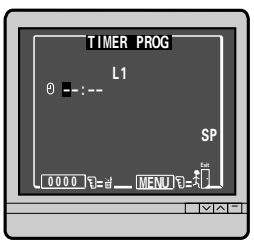


3



Select the TV programme number to be recorded. For example, press 0 4 for TV channel 4.

Note: If you enter a TV programme number that you have not preset in the VCR, you cannot proceed to the next setting.

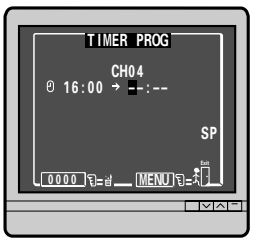


To record video and audio signals from external equipment via the Scart socket on the back of the VCR, press the AUX button so that "L1" is displayed on the TV screen in place of a programme number.
To record via the DECODER socket on the back of the VCR, press the AUX button again to display "L2".

(TIMER RECORDING)

Controls **TV Screen**

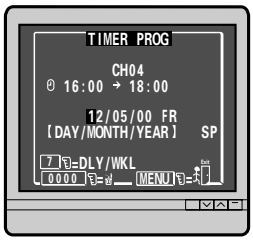
4



Select the start time.
For example, press ① ⑥ ⓪ ⓪ for 16:00 (4:00 p.m.).

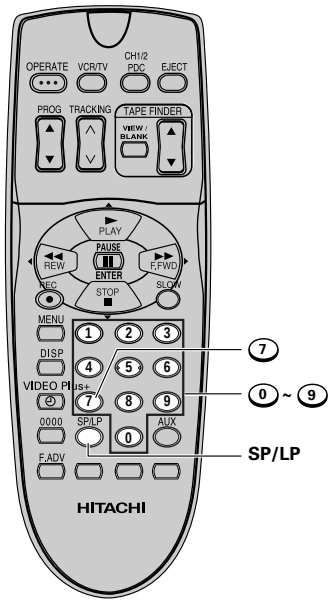
0:00 for midnight and12:00 for noon

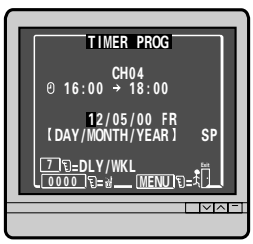
5



Select the stop time.
For example, press ① ⑧ ⓪ ⓪ for 18:00 (6:00 p.m.).

6





Press the SP/LP button to select the recording speed (SP, LP, or no display).
Note: If you select no display, the VCR will record at the speed displayed by the on-screen display. Check the recording speed after programming the timer. Press the SP/LP button to display the recording speed.

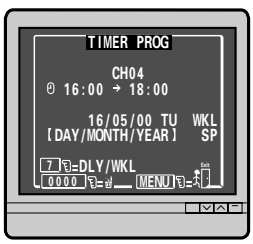
7

Select the date for recording.

To record on a single day up to one year ahead
For example, press ① ⑦ ⓪ ⑤ to begin recording on the 17th of May.

To record at the same time every day of the week

Select the first recording date using the number buttons. Then press the ⑦ button once to display "DLY".



To record on a specified day at the same time each week

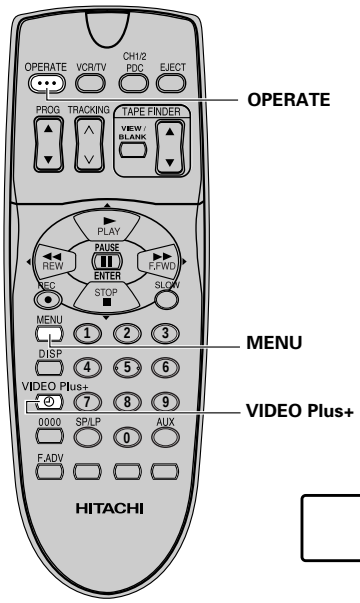
Select the first recording date using the number buttons.

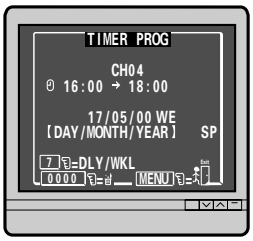
Press the ⑦ button twice to display "WKL".

Note: When the ⑦ button is pressed again, "WKL" will disappear and the screen will return to the programming mode for one-time recording.

Controls **VCR's Display**

8



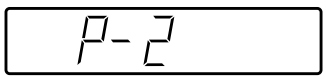


Now, programming has been completed to record one event.

Press the MENU or VIDEO Plus+ button.

The VCR shows the timer programme number for a few seconds.

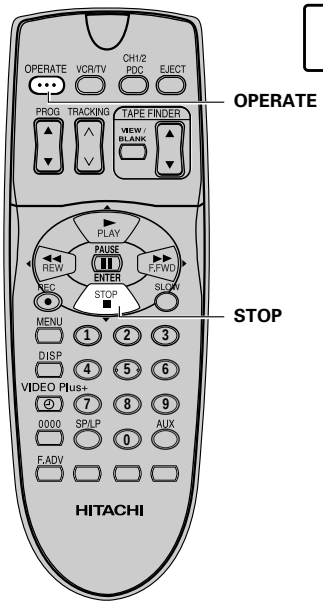
VCR's display

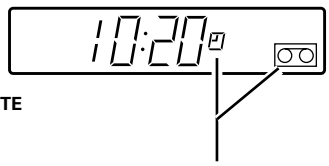


9

If you want to programme other programmes, repeat steps 2 to 8.

10





Must be lit.

To activate the VCR's timer and make a recording at the preselected time, be sure to **press the OPERATE button to turn the VCR off**. Of course a cassette which has an intact safety tab must be inserted.
To stop the timer recording press the OPERATE button and then the STOP button within 10 seconds.

(TIMER RECORDING)

Recalling and clearing programmes from the VCR's memory

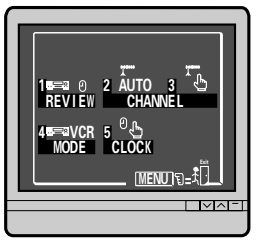
Controls **TV screen**

1

Turn the VCR and TV on.

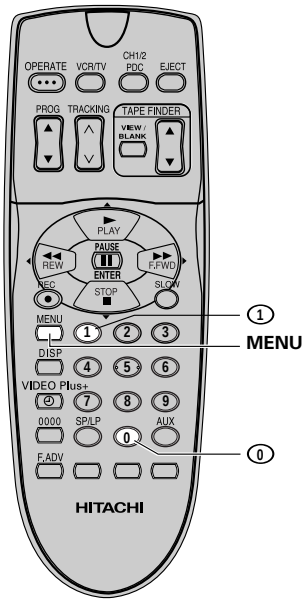
Be sure that the TV is set to the video programme number.

2

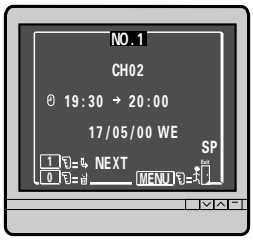


Press the MENU button.

The OSD menu appears on the TV screen.



3



Press the ① button (REVIEW).

The TV screen will display the information you entered for the lowest programme number.

Press ① again if you want to view the next programme information immediately.

If no more programme information is stored, the menu screen will be restored.

4

To clear a programme, **press the ⓪ button** when the programme information you want to clear is displayed.

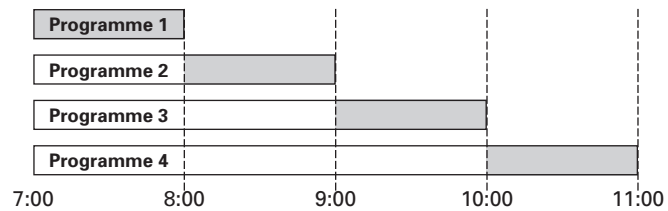
One event's timer programme data is erased from the VCR's memory when the timer recording is finished, but daily and weekly programmes remain in the VCR's memory even after the timer recording is finished.

5

When you finish reviewing the programmes, **press the MENU button** to switch off the on-screen display.

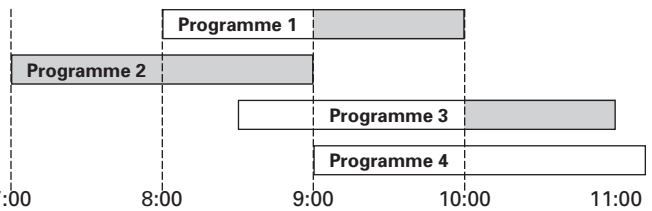
Programme priority

Example 1: When the programme start time is the same for more than one programme on the same day, they are recorded in the following order of programme 1, 2, 3 .... 8.



7:00 — 8:00 Programme 1
8:00 — 9:00 Programme 2
9:00 — 10:00 Programme 3
10:00 — 11:00 Programme 4

Example 2: When the programmes overlap, the earlier programme has priority.



7:00 — 9:00 Programme 2
9:00 — 10:00 Programme 1
10:00 — 11:00 Programme 3
11:00 — Programme 4

The actual programme recorded and the sequence is as shown in the shaded part of the diagram.

PREPARE RECORDING USING SATELLITE DECODER

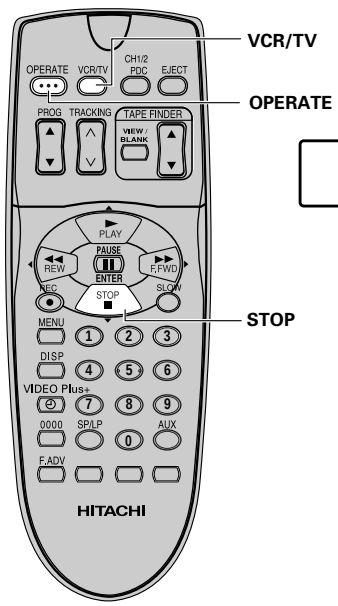
"PREPARE - REC" function allows you to easily prepare the VCR to record signals from a satellite/cable decoder, without setting the timer programme. This avoids the necessity of doing timer programming twice. (For the decoder and the VCR).

Controls **VCR's Display**

1

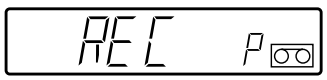
Connect your decoder to L2 (the blue socket behind the set) as shown in page 7.
Then set the PREPARE REC mode in the menu to on (√). See page 44.

2



Set the timer and channel on the satellite decoder according to proper procedure of that decoder.

3



Insert a cassette with safety tab intact. Turn the VCR to OPERATE off mode, then press VCR/TV button for more than 3 seconds.
The VCR will display "REC P".
The VCR is now ready to receive and record signal from the satellite decoder.

4

At the programmed start-time, the decoder will activate your VCR to start recording.
Subsequently, the decoder will signal the VCR to stop recording and to shut-off.

5

To cancel the PREPARE REC setting, you can do one of the following:

a) Enter the OSD menu and turn PREPARE REC to off (–).

b) Eject the tape.

c) If recording has not yet started, by pressing VCR/TV for more than 3 seconds.

d) If recording has already started, by pressing the OPERATE button, followed by STOP button within 10 seconds.

Please Note:

Not all satellite receivers support this function.

Section-3 Additional Operations

Special Characteristics Pages 39 — 41

This explains the following additional convenient features:
Linear Time Counter; shows the actual elapsed time in hours, minutes, and seconds.
Automatic Rewind/Automatic Rewind Shut-Off; automatically rewinds the tape at its end and automatically shuts off at its beginning if the VCR is switched to the standby mode.
Rental play; allows you to enjoy tapes without safety tab.
Tape Finder function: allows you to search for programme you want to view or the point from which you want to start recording on tape.

Menu Features Pages 42 — 44

Menu features; shows you various displays; programme review, OSD feature on/off selection, AUTO BLUE on/off selection, NICAM on/off selection, AUTO CLOCK on/off selection, PROGRAM PLAY on/off selection and PREPARE REC on/off selection.

Editing Pages 45 — 46

Tape Dubbing; allows copying from another pre-recorded tape.

“Satellite or Cable Box” Decoder Operation Pages 47 — 48

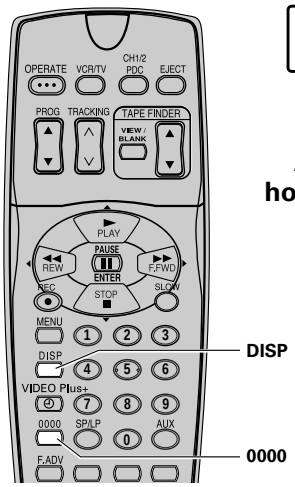
This tells you how to connect a "satellite or cable box" decoder and record its programme.

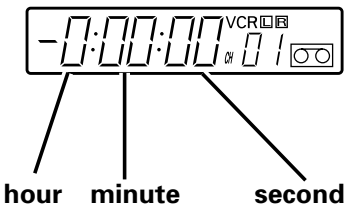
Hi-Fi Sound Pages 49

This tells you the format and specifications for Hi-Fi sound.

SPECIAL CHARACTERISTICS

Linear time counter





Press the DISP button twice to select the linear time counter display. Every time the button is pressed, it changes the VCR's display between the clock time display and time counter display.

- The counter is reset to 0:00:00 when a tape is ejected.
- When the tape starts, it counts up from 0:00:00 and the counter indicates the elapsed time.
- Pressing the 0000 button resets the time counter to "0:00:00".

Notes:

- The linear time counter does not operate when nothing is recorded on the tape.
- The counter may not be able to count the time precisely with some types of tape and at particular positions of the tape.

Automatic rewind

The VCR automatically rewinds the tape when the end of tape is reached.
To prevent accidental erasure, the VCR does not rewind the tape after timer recording.

Rewind shut off

If the OPERATE button is pressed during the rewind operation, the VCR will be turned off automatically after the tape has been completely rewound.

Rental Play

The VCR will automatically start playback when a cassette with its safety tab removed is inserted into the VCR.
Then the VCR will enter the rewind mode when the tape reaches its end or when the VCR plays the non-recorded section for approximately 30 seconds, and then VCR will eject the cassette at the beginning of tape and turn the power off.

(SPECIAL CHARACTERISTICS)

TAPE FINDER function

TAPE FINDER function allows you to search for a programme you want to view or the point from which you want to start recording on tape, with the following three functions:

- INDEX SEARCH: To locate the beginning of a recorded programme.
- BLANK SEARCH: To locate the beginning of a blank (non-recorded) section on tape.
- EASY VIEW: This switches fast forward or rewind to visual search so that you can search for a scene you want to view while scanning the pictures.

Index function

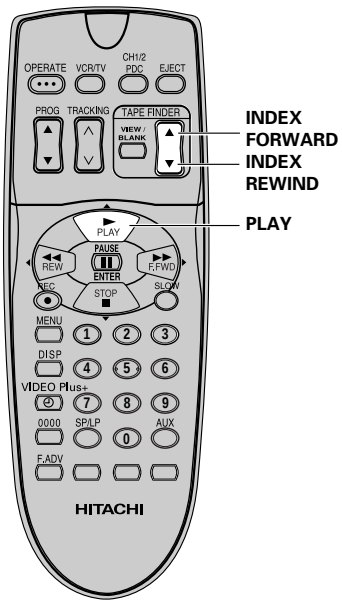
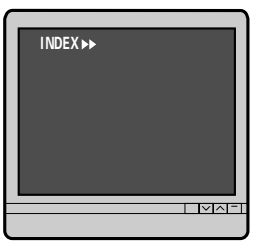
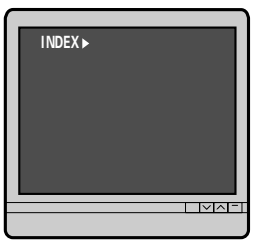
The cassette tape may be recorded using the tape indexing feature for the rapid location of any section.

To record using the indexing feature
Record as usual. Each time you press the REC button to begin recording, an index signal is recorded on the tape.

The index signal is always recorded on the tape when you begin to record. If you use the pause feature between different recorded programmes no new index signal will have been recorded. Press the stop button and then record between different recordings.

Note: An index signal is also recorded during recording pause by pressing the PROG ▲ / ▼ button to switch the channel to be recorded.

To locate a programme using the index feature
The index function lets you view the first few seconds of all recordings on the tape. This also allows you to jot down details of all recordings on the tape easily.
To locate a programme using the index feature, turn the VCR on and insert a cassette which was recorded using the tape indexing feature, then operate as follows.

	Controls	TV Screen	
1			**Press the Index forward or Index rewind when a cassette is loaded and the VCR is in the stop mode.** To rewind the tape, press the **Index rewind** button. To fast forward the tape, press the **Index forward** button. The tape will be rewound or fast forwarded until an index mark is detected.
2			When the VCR has located an index mark, it will enter the playback mode for approximately 15 seconds. This is long enough for you to recognize the programme. The VCR then winds the tape to subsequent index marks in sequence.
3			When you see the programme you want to watch, **press the PLAY button** to start playback. The INDEX indicator will disappear from the TV screen.

To locate the beginning of a blank section (BLANK SEARCH)

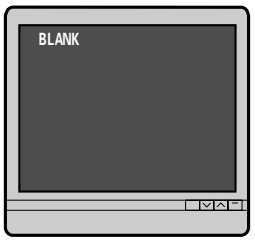
This function searches for a non-recorded section of remaining tape, or unused tape, and stops the tape when it locates such a section.

Notes:
- BLANK SEARCH cannot be operated with a cassette without a safety tab.
- BLANK SEARCH may not operate when a blank section lasts no more than five minutes.
- BLANK SEARCH will not be engaged in the following sections since they are not recognized as blanks:
  —Sections with noise
  —Sections where only sound has been recorded
  —Sections where previous recordings have not been totally erased

Controls **TV Screen**

1

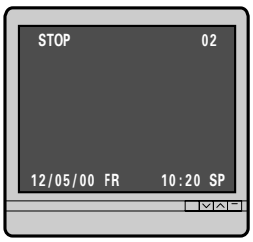
VIEW/ BLANK



Press the ▭ (VIEW/BLANK) button in the STOP mode.
The BLANK SEARCH screen will appear and the tape will fast forward automatically.
- The blank which is the nearest the current tape position is searched for.
- When a blank is detected, the tape will automatically rewind to the beginning of the blank.

Notes:
- When a cassette without a safety tab is inserted, "TAb" will flash in the VCR display for several seconds and the cassette will be ejected automatically.
- When a cassette has not been inserted, the "TAPE" will flash in the VCR display to warn you.

2



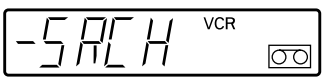
When the beginning of blank is located, the STOP screen will appear for five seconds and the tape will stop.

Note: Make sure that the tape is at the beginning of blank before you start recording or editing.

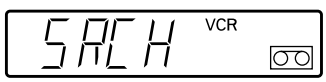
Cautions: Ensure the tape recording area is enough for your TV programme.

Switching rewind or fast forward to visual search (EASY VIEW)

VIEW/ BLANK



Hold down the ▭ (VIEW/BLANK) button during rewind (or fast forward), and the mode will switch to visual search, so that you can search for a scene you want to view while scanning pictures.



Hold down the ▭ (VIEW/BLANK) button during rewind:
The tape will be visually scanned in the reverse direction while the button is held.

Hold down the ▭ (VIEW/BLANK) button during fast forward:
The tape will be visually scanned in the forward direction while the button is held.
- When the button is released, the tape will rewind or fast forward again.

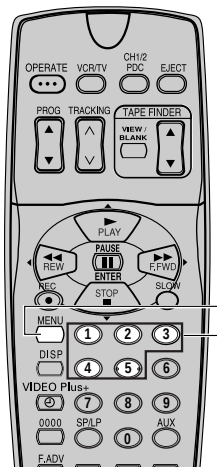
MENU FEATURES

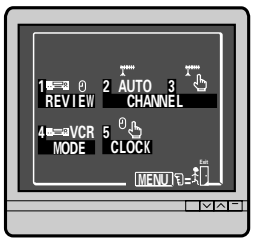
Controls **TV Screen**

1

Turn the VCR and TV on, then set the TV to the video programme number.

2





Point the remote control handset at the receiver on the front of the VCR.

Press the MENU button.

The menu, as illustrated, will appear on the TV screen.

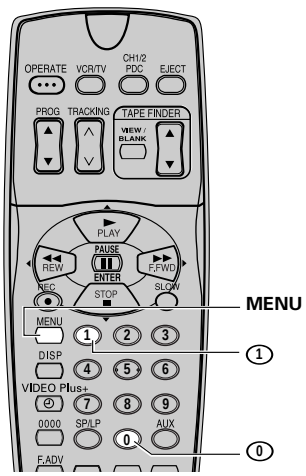
3

MENU

① ~ ⑤

Press one of the buttons marked ① to ⑤ to select the required display.

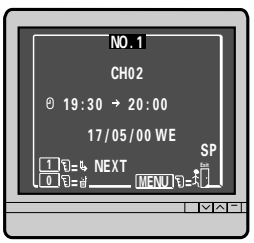
Checking (reviewing) the programme information



MENU

①

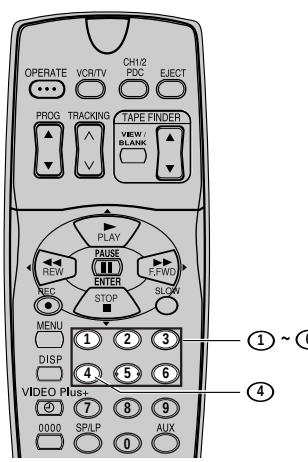
⓪



Press button number ①.
The TV screen will display the information you entered for the lowest programme number for 1 minute.
Note: If no programme information is stored, the menu screen will stay as it is even when button ① is pressed.

- Press ① again if you want to view the next programme's information. If no more programme information is stored, the menu screen will be restored.
- Pressing ⓪ will clear the programme.
- Press the MENU button to return to the original picture.

Video mode setting



① ~ ⑥

④

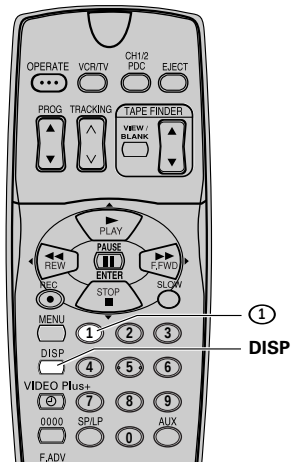
You can change the VCR mode as required.

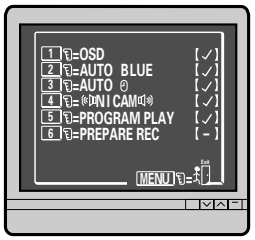
Press button ④.

The menu, as illustrated, will appear on the TV screen.

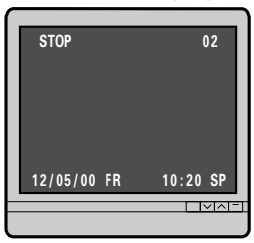
Press one of the buttons marked ① to ⑥ to change the required display. (See next page for details.)

OSD (√) or (—)





On-screen display



Press ① to change the On-Screen Display setting.

(√): Whenever you change the mode, the new mode, programme number, date, time and tape speed are automatically displayed on the TV screen for a few seconds.

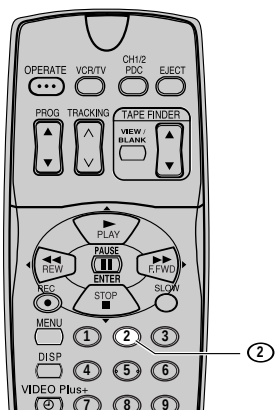
(—): Nothing will be displayed on the TV screen even when the VCR is operated.

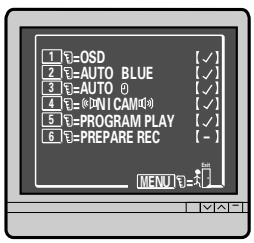
Notes:

- If the DISP button is pressed , eventhough OSD "on (√)" or "off (**–**)" is set, the on-screen display will appear for a few seconds.
- When the DISP button is pressed again before the display disappears, it will change the VCR's display between the clock time display and time counter display.

Note: When a NTSC tape is played, no operation mode will appear on the TV screen regardless of the OSD on (√) or off (–) setting.

AUTO BLUE (√) or (—)





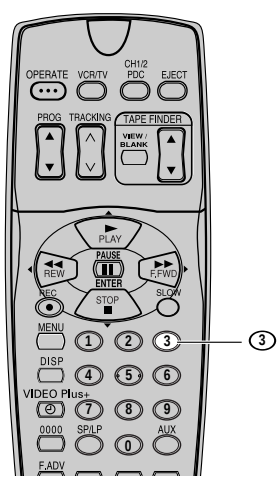
Press ② to change the auto blue setting.

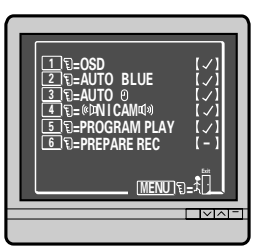
(√): The TV screen becomes blue when receiving a channel on which a signal is not being broadcast or a channel on which a weak signal is being broadcast.

(—): The TV screen does not become blue.

Note: If no picture appears when a programme is received, specify the AUTO BLUE option as (–).

AUTO CLOCK (√) or (—)





Press ③ to change the auto clock setting.

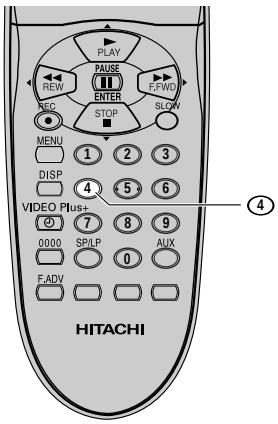
(√): The clock will be set automatically when the VCR is tuned to a channel which transmits a PDC signal.

(—): The clock will need to be set manually.

Refer to page 19.

(MENU FEATURES)

NICAM (√) or (—)

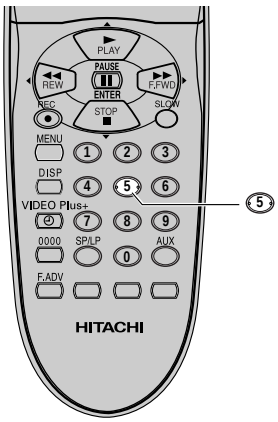


Press ④ to change the NICAM setting.

(√): Usually select (√). The VCR discriminates whether the broadcast is NICAM or not automatically.

(—): Select (—) when you do not want to receive NICAM broadcasts.

PROGRAM PLAY (√) or (—)



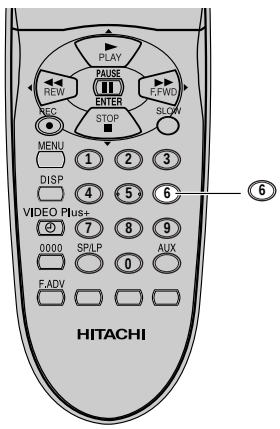
Press ⑤ to change the PROGRAM PLAY setting.

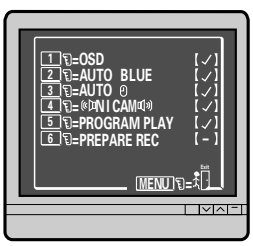
(√): After timer recording has finished, the VCR will automatically rewind the tape to locate the programme just recorded then begin playing it back, by merely turning the VCR on.

Note: If two or more programme were recorded the last is played back.

(—): The auto programme play feature is switched off.

PREPARE REC (√) or (—)





Press ⑥ to change the PREPARE REC setting.

(√): Your satellite/cable decoder will automatically activate the VCR to start and stop recording.

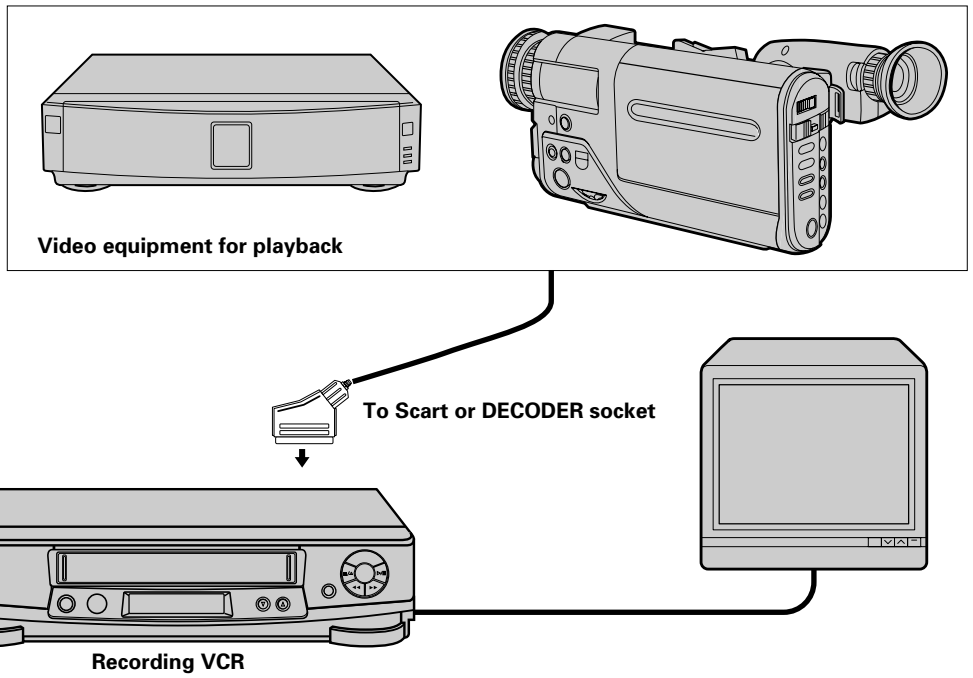
Refer to page 37.

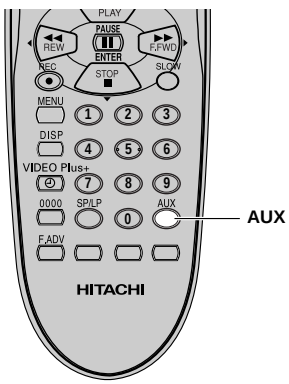
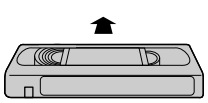
(—): The VCR needs to set for the timer recording, if you want to record satellite broadcasts unattended.

Please Note:

Not all satellite receivers support this function.

EDITING — Tape Dubbing



	Controls	VCR's Display	
1			Connect the second video equipment to this VCR as shown above. (Refer to the manual of second video equipment for connection) If the playback video source is connected to the Scart socket, the TV must be connected to the RF OUT terminal of this VCR. **Note:** If using this VCR for playback during dubbing or other operation, you must use the black Scart socket as a connector source.
2			Turn the VCR and TV on, then set the TV to the video programme number.
3			**Press the AUX button** to display "L1", or "L2" in the VCR's display. Select "L2" to dub the source input via the DECODER socket or "L1" to dub the source input via the Scart socket on the back of the VCR. If "L1" or "L2" is not displayed, the picture of the TV programme being received will be dubbed.
4			**Insert a blank cassette** into the VCR for recording, and the cassette to be copied into the playback VCR.

(EDITING — Tape Dubbing)

Controls **VCR's Display**

5

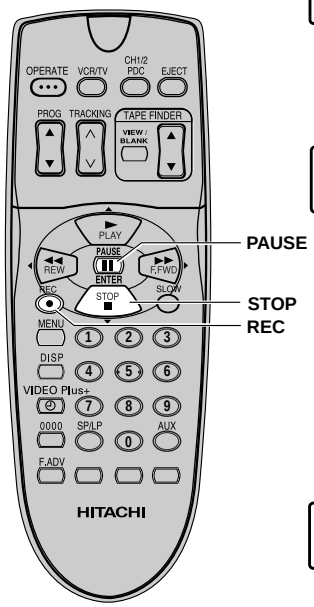
Press the REC button on the recording VCR and the play button on the playback VCR.

6

To edit out unwanted material, **press the PAUSE button** on the recording VCR while it is recording at the appropriate time. Press the PAUSE button again to resume recording.

7

To end tape dubbing, **press both STOP buttons**.



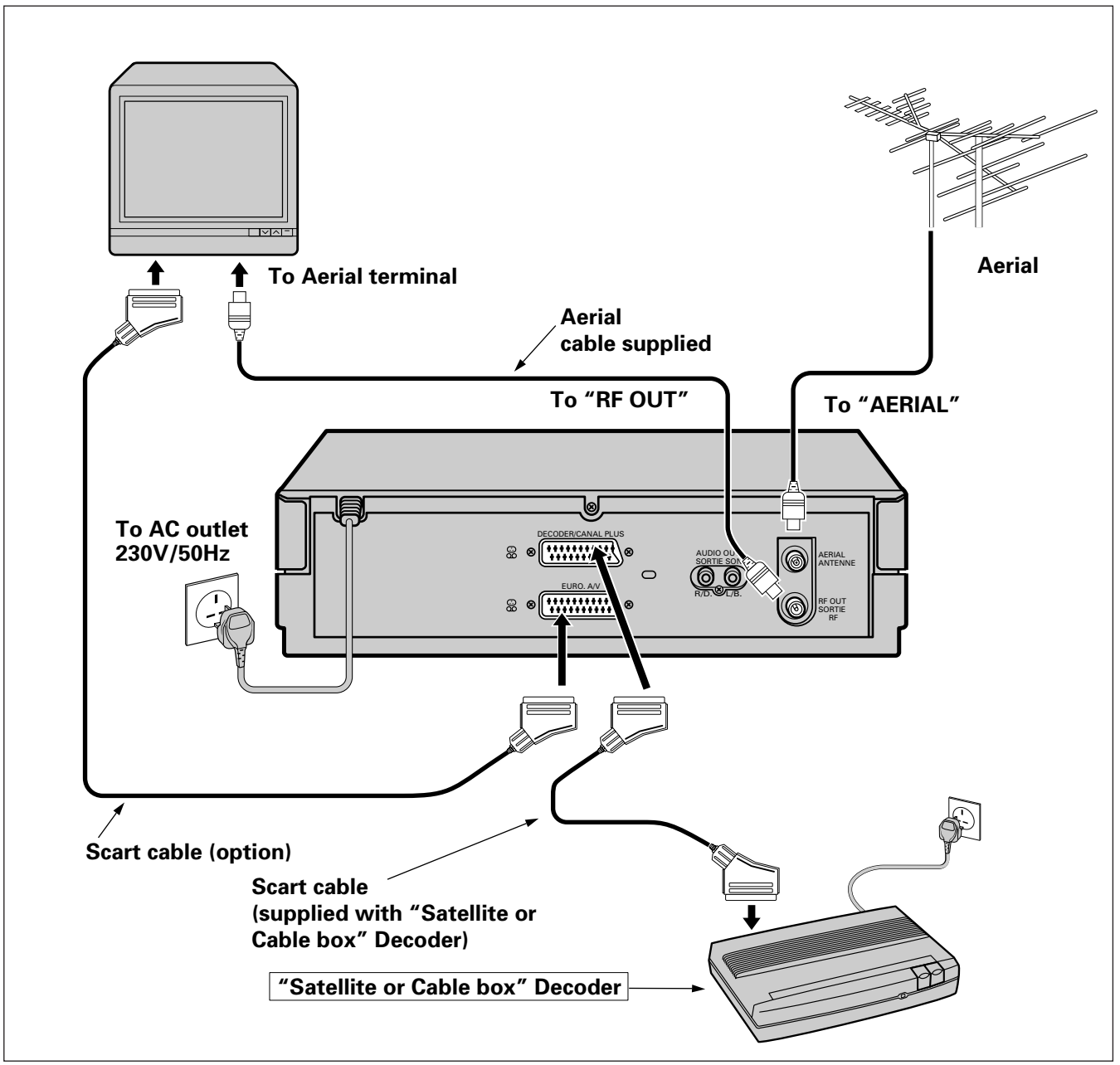
“SATELLITE OR CABLE BOX ” DECODER OPERATION

Connect the “Satellite or Cable box” decoder as follows.

What is a “Satellite or Cable box” Broadcast?

The radio waves are transmitted from the broadcasting station in the same way as with an ordinary TV broadcast in the “Satellite or Cable box” system, however, the radio waves are scrambled, therefore you cannot receive them or view the broadcast on the TV without unscrambling. You must connect an exclusive decoder to perform this unscrambling and then you can view the “Satellite or Cable box” broadcast like an ordinary TV broadcast.

Consult your dealer for details.



("SATELLITE OR CABLE BOX" DECODER OPERATION)

■ **To record the "Satellite or Cable box" programme while viewing it**

1. Turn the TV and VCR on.
2. Set the TV to the programme number for VCR (video programme number).
3. Press the button labeled AUX on the remote control until 'L2' is showing in the VCR display.
4. Start recording.

■ **You can view a "Satellite or Cable box" programme even when playing back a tape by pressing the VCR/TV button to set the VCR to the TV mode.**

Hi-Fi SOUND

This VCR records sound using the following two formats.

Hi-Fi sound

FM sound recorded using the rotary audio heads.

Normal (mono) sound

Records in monoaural using the same format as with a non-Hi-Fi VCR. Therefore, conventional VCRs can be used for playback.

Remarkable Specifications of Hi-Fi Sound

Frequency Range:	20 Hz to 20 kHz
Dynamic Range:	More than 90dB
Wow and Flutter:	Less than 0.005% WRMS

Recording Stereo Broadcasts

Stereo programmes are recorded in Hi-Fi on both the L and R channels and also recorded on the mono track as monoaural.

Recording Bilingual Broadcasts

Both main speech and sub speech sounds are recorded on the Hi-Fi audio tracks separately. See "Audio to be recorded according to the NICAM broadcast" on page 28 for the sound that will be recorded on the mono audio track.

Section-4 Subsidiary Information

Problem Guide Page 51

Some problems you will be able to solve easily by checking a few basic items.
Please follow this section before you call for help or take your VCR to your dealer. It could save your time and money.

User Guide Display Page 52

Maintenance Page 53

Specifications Page 54

PDC (Programme Delivery Control) function Page 55

Battery Safety Guidelines Page 56

Warranty Letter Page 57

Some Do's and Don'ts Page 59

PROBLEM GUIDE

Sometimes problems can be solved easily by checking a few basic things.
Check below before you call for help or take your unit to your dealer.

No power
- Check to see if the VCR is plugged into an AC mains socket.

Does not respond to remote control handset
- Check to see if there are batteries in the handset, their polarities are correct, and they are fitted correctly.
- The handset is not aimed at the VCR.
- Weak batteries in the handset.

Will not record
- No cassette in the VCR.
- Safety tab removed from cassette.
  (In this case, the cassette will be ejected.)

Will not playback
- No cassette in the VCR.
- For playback, TV must be tuned to the video programme number.
- Set the TV to the video input mode when the VCR and TV are connected via a Scart connector (see your TV manual).
- Press the VCR/TV button on the remote handset to display the VCR indicator in the VCR display when the VCR and TV are connected via a Scart connector.

Snowy/Noisy picture
- Make sure the TV is fine tuned.
- Head cleaning may be required. See "MAINTENANCE".
- Some snow or streaks are normal during visual search, still and slow playback.

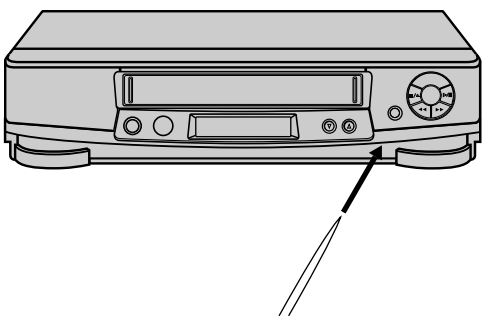
Will not make timer recordings
- The VCR should be in the standby mode to activate timer recording.
- Programmes entered incorrectly.
- Clock was not set correctly.
- Programme exceeded cassette length.
- No cassette or cassette's safety tab removed.

Clock shows — — : — —
- Power interrupted.

Poor/No picture in normal TV viewing
- Carefully check aerial connection.

Indication of the VCR display appears abnormal/No button can be engaged
- Push the reset switch using a toothpick, etc.
  The display will be reset. Then set the information again.

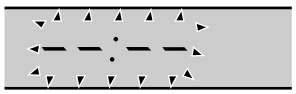
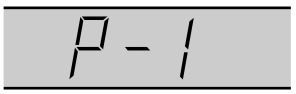
Auto Installation not function
- MIS-operate the auto installation in page 10.
  For Recovery, refer page 12.



USER GUIDE DISPLAY

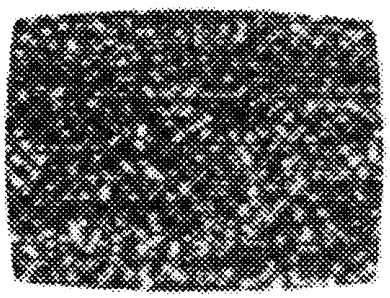
Guide indications in VCR display

The following indications appear in the VCR display to tell you the current status of your VCR.

Indication	When it appears	Meaning and troubleshooting
 (flashes for about 5 seconds)	When programming the timer	• The VCR clock has been set to "– – : – –". Set the time and programme the timer.
(lights for about 5 seconds)	When programming the timer	• Eight programmes have already been stored. Cancel unnecessary programme and store the new programme.
 (lights for about 5 seconds)	When you press the MENU or VIDEO Plus+ button to end the programming	The VCR shows the timer programme number which is occupied.
(flashes continuously)	When you turn power off after programming the timer	• A cassette has not been inserted or a cassette without safety tab has been inserted. A cassette without safety tab will be ejected automatically. Insert a cassette with safety tab intact.
(flashes for about 3 seconds)	When you press the play, record, fast forward, rewind or Tape Finder button	• A cassette has not been inserted. Insert a cassette.
(flashes for about 3 seconds)	When you press the record button for recording or dubbing, or press the ▭ (VIEW/BLANK) button for Blank Search	• A cassette without safety tab has been inserted. It will be ejected automatically. Insert a cassette with safety tab intact.

MAINTENANCE

1. To maintain the optimum performance of this VCR, regular periodic maintenance is required. Your dealer will advise you further.
2. Maintenance and adjustments may not be carried out by the user. In all cases of difficulty or doubt, consult your dealer.
3. Head cleaning
   Dirt accumulated on the video heads after a period of time may cause the playback picture to become blurred or part of the video information to be lost. This does not mean that the recorded programme has been erased but head cleaning is required. In this case, please consult your dealer.



SPECIFICATIONS

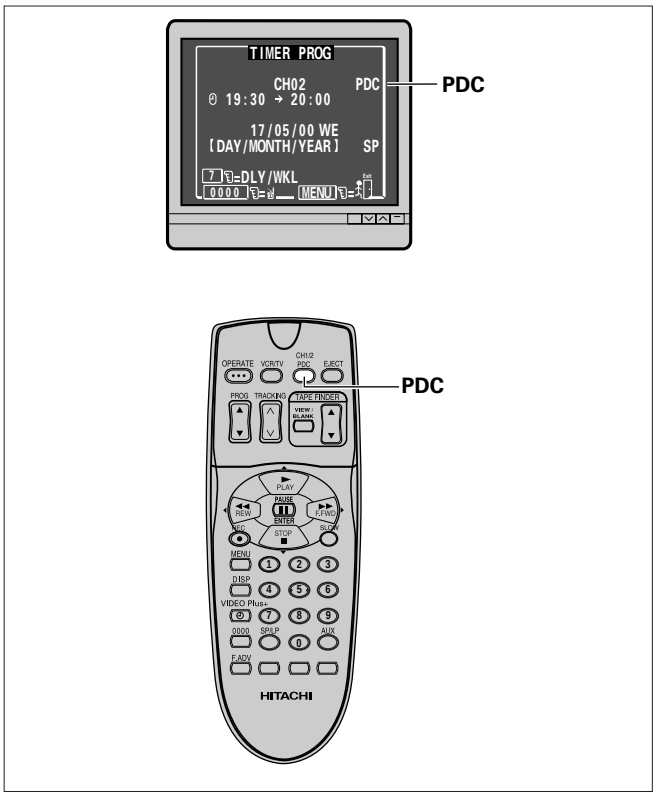
Format:	VHS PAL Standard
Recording:	Rotary Two-Head Helical Scan Azimuth Recording
Tape Speed:	23.39 mm/sec. — SP, 11.7mm/sec. — LP
Tape Width:	12.7 mm
Operation Temperature:	5°C to 40°C
Video:	PAL colour (system I) & CCIR monochrome signals 625 lines
Recording Time:	240 min. with E-240 cassette — SP
	480 min. with E-240 cassette — LP
Aerial Input:	UHF channels 21 — 69
RF Output:	UHF channel 35 (22 — 69 adjustable) (System I)
Video Input:	0.5 to 1.5Vp-p 75 ohm Unbalanced
Video Output:	1Vp-p 75 ohm Unbalanced
S/N Ratio (Video):	More than 43 dB
Horizontal Resolution:	Colour 260 lines
Audio (Linear)	
Input:	PERI: – 3.8 dBm 10 Kohm, LINE: – 7.8 dBm 50 Kohm
Output:	PERI: – 3.8 dBm 1 Kohm, LINE: – 7.8 dBm 1 Kohm
S/N Ratio:	43 dB
Frequency Range:	70 Hz to 12 kHz
Hi-Fi Audio	
Frequency Range:	20 Hz to 20kHz
Dynamic Range:	More than 90dB
Wow and Flutter	Less than 0.005% WRMS
RF Audio Reception:	NICAM Digital Stereo (I-PAL)
Fast Forward/Rewind time:	90 secs. on S:FF or S:REW
Power:	AC 230V, 50 Hz
Power Consumption:	19W (including timer)
	3.0W (standby mode)
Timer:	24-hour digital indication
Cabinet Size:	380 mm(W) x 93 mm(H) x 275 mm(D)
Weight:	Approx. 3.5 kg
Accessories Included:	1 — Aerial cable
	1 — Infrared remote control handset
	2 — Batteries

* Design and specifications are subject to change without notice.

PDC (Programme Delivery Control) FUNCTION

This VCR incorporates the PDC function.

PDC function



If the VCR is tuned to a TV station transmitting a PDC signal, the VCR automatically takes any delay, earliness or extension of the programme into account and can record the specified programme. For example, assume that you programme the timer for a football game on station 8 from 19:00 to 20:45 on Saturday and the football game which is broadcast is changed to 21:00 to 23:00, the PDC function works and the VCR records the football game automatically from 21:00 to 23:00.

Caution
For the PDC function to work, the start and end time must be keyed-in EXACTLY as scheduled (as advertised); even though the actual broadcast may vary from the schedule.

Notes:

1. The first time you do timer programming with this set, the "PDC" will be off.
2. To switch on the PDC function, press the PDC button once. Pressing the button again turns PDC off.
3. Subsequently, the on/off default follows your previous setting.
4. Always programme the timer for one TV programme to record the programme with the PDC function turned on. If you programme the timer for a football game and a movie on station 3 sequentially from 10:00 to 14:00 for example, only the football game will be recorded but the movie will not.
   In this case, programme the timer with the PDC off or input the other programme using another programme number to turn the PDC function on again.
5. When the VCR is tuned to a station transmitting a PDC signal but the signal conditions are poor, programme the timer with PDC turned off. If you programme the timer with PDC turned on, the PDC function may not operate normally.
6. The letters "PDC" will appear on the TV screen when reviewing the programmed information.
7. If the "PDC" indication is on and the broadcast programme does not have the PDC signal, your timer recording will function according to the time you have set on the VCR.
8. Programme without the PDC signal will be deleted after the recording is done. Whereas, the programme with PDC signal only will be deleted automatically after 4:00 am the next morning.

HITACHI - YOUR GUARANTEE OF EXCELLENCE (for UK only)

For the period of **12 MONTHS** from the date of purchase your product has the benefit of our **FULL PARTS AND LABOUR GUARANTEE** as detailed below.
We undertake to replace or repair any part of the product which fails due to manufacturing defect within 12 months of the date of purchase provided that:

1) The product has been installed and used only in accordance with the instructions supplied with the product.
2) The product has not been repaired, maintained, or modified by any person other than our authorized Engineer.
3) The product serial number is not removed or altered.

This guarantee does not apply to products acquired second-hand or for commercial or communal use.
This guarantee does not extend to user control adjustments, battery replacement and aerial adjustment. Any parts replaced under guarantee shall become the property of HITACHI HOME ELECTRONICS EUROPE LTD.
Please note that evidence of the date of purchase will be required before service under guarantee is carried out.
This guarantee does not affect your statutory rights. In all cases of difficulty consult your HITACHI dealer.

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Dukes Meadow Millboard Road Bourne End
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UNITED KINGDOM
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SOME DO'S AND DON'TS ON THE SAFE USE OF EQUIPMENT

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

★★★★★★★★★★

DO read the operating instructions before you attempt to use the equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

DO be careful with glass panels or doors on equipment.

★★★★★★★★★★

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way — switch off, withdraw the mains plug and consult your dealer.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off using the switch on the equipment and make sure that your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.

DON'T listen to headphones at high volume, as such use can permanently damage your hearing.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishings. Overheating will cause damage and shorten the life of the equipment.

DON'T use makeshift stands and ***NEVER*** fix legs with wood screws — to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL

— *NEVER* let anyone especially children push anything into holes, slots or any other opening in the case — this could result in a fatal electrical shock;

— *NEVER* guess or take chances with electrical equipment of any kind

— it is better to be safe than sorry!

★★★★★★★★★★

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Printed in Malaysia

QUICK SET UP GUIDE

Hitachi Video Cassette Recorder

VT-FX950E(UKN)

Dear Hitachi Customer,

Congratulations on your choice of Hitachi Video Cassette Recorder (VCR). Welcome to our company-wide commitment to your complete satisfaction and viewing enjoyment.

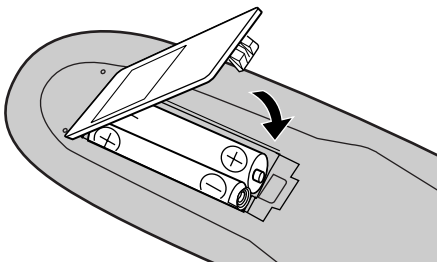
Before using your Hitachi VCR for the first time, we suggest that you spend a few minutes reading these set-up instructions.
Even if you never used a VCR before, you can connect it up and tune it in quickly by following this QUICK SET-UP GUIDE.

Contents

- Accessories supplied.....1
- Connection 2
- Auto Install 3-4
- Pre-Tuning the Built in Tuner 5
- Resetting the Clock.....6

Fitting the Remote Control Batteries

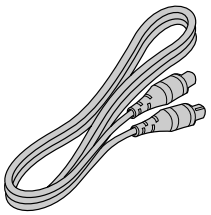
- Remove battery cover of the remote control handset.
- Insert the two batteries provided.
- Ensure that the batteries are inserted correctly, and that the + and – terminals match those marked inside the battery compartment.
- Replace the battery cover.



Accessories Supplied

Check and identify the accessories supplied. If any are missing or appear damaged, contact your dealer immediately.

①

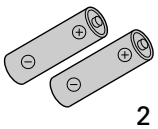


Aerial cable for connecting this VCR and a TV

②

Remote control handset

③



2 pcs.

Batteries for remote control handset (R6)

Cautions:
When the VCR is moved from a cold to a warm place, **dew** condensation can occur on the cylinder.
To avoid damaging the cylinder or tape **do not operate** the set immediately. Allow it to dry **by leaving it powered on** for 2 ~ 3 hours.

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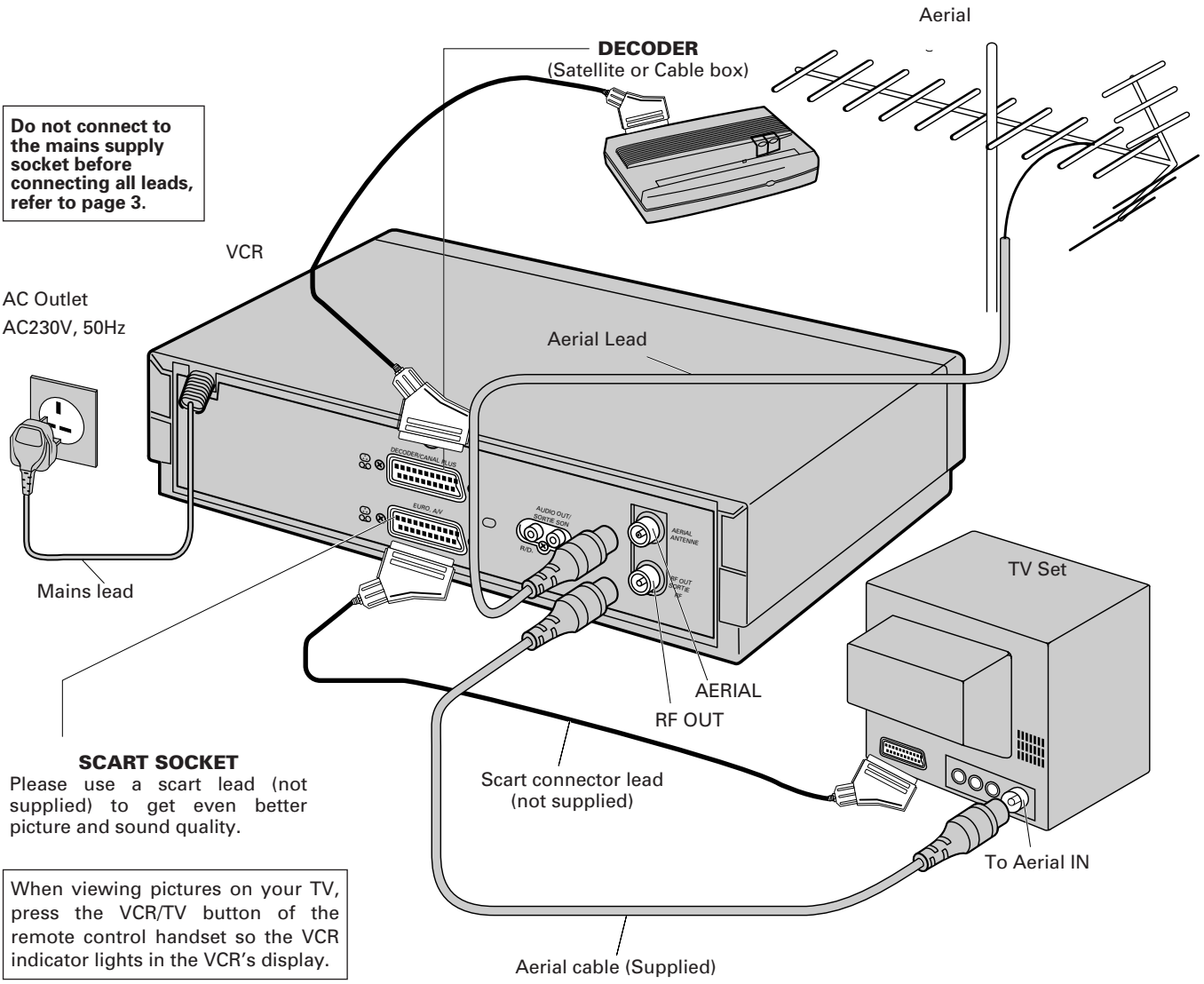
Connection

Connect the set and cables as shown below **but do not** connect the VCR to the mains power supply just yet. Otherwise, the auto installation will not work.


Aerial
DECODER
(Satellite or Cable box)
Do not connect to the mains supply socket before connecting all leads, refer to page 3.
VCR
AC Outlet
AC230V, 50Hz
Aerial Lead
Mains lead
TV Set
AERIAL
RF OUT
SCART SOCKET
Please use a scart lead (not supplied) to get even better picture and sound quality.
Scart connector lead
(not supplied)
To Aerial IN
When viewing pictures on your TV, press the VCR/TV button of the remote control handset so the VCR indicator lights in the VCR's display.
Aerial cable (Supplied)

Auto Install

Auto Install (Plug & Play) function

This automatically tunes all broadcast channels, sets the clock and date.

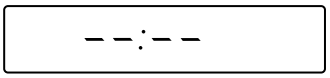
To operate proceed as follows;

---

1 Plug the aerial lead into the VCR. Plug the aerial cable (supplied) from the VCR RF OUT into the TV aerial input. Please refer to page 2.

VCR **TV screen**

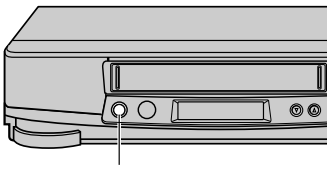
2

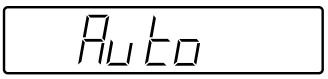


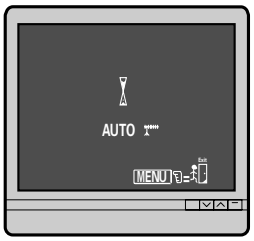
Connect to main power supply after completely connecting all leads (as described on page 2: Connection).

The VCR will be in standby mode at this stage and the VCR display will show "– –:– –".

3







Press OPERATE button.

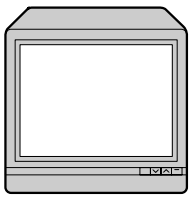
"Auto" will appear in the VCR display.
During this time, if your set-up include scart connector and the TV is set to AV line, the TV screen will display as shown.

4

After this process is complete, the RF output channel will appear in the VCR display.
For example, RF output channel 35.

Refer page 4, item 6 for further tuning.

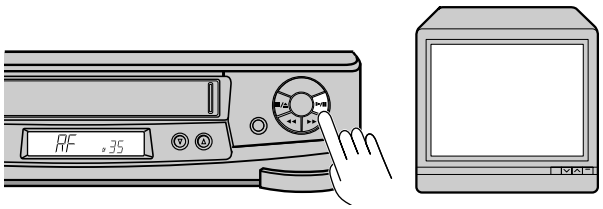
5



Switch on your TV and select an unused programme number. i.e. one not used for BBC1, ITV, etc. (Please consult your TV instruction manual as your TV may have a special VCR programme number which must be used.)
Note: This programme number will be your VCR programme from now on.

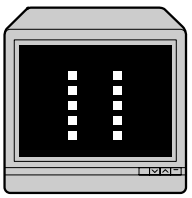
Video **TV screen**

6



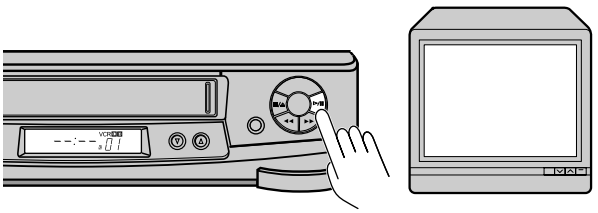
Press the PLAY/STILL button
Note: If the VCR display "RF CH - -", press the STOP button on the VCR or on the remote control. The RF channel data will appear on the VCR display. Press the PROG △ / ▽ button to change the RF channel to "RF CH35". To stop the RF output, press the STOP button on the VCR or on the remote control again.

7



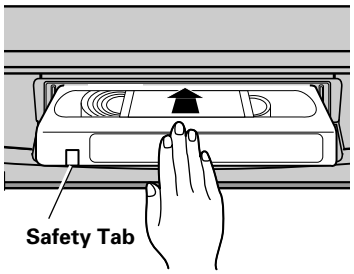
Tune your TV (consult your TV instruction manual) until the test pattern shown appears.
The correct tuning position is when the picture is clear. Ensure this programme is stored in your TV.

8



Press the PLAY/STILL button again, the test pattern will disappear and the VCR will now come out of the standby mode into the operate mode.

9



You should now be able to playback a prerecorded cassette.
Insert the cassette as shown. If the safety tab is removed then playback will start immediately. If not press the PLAY/STILL button and the picture will appear on the screen.

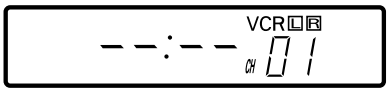
IMPORTANT:
Insert the cassette into the VCR. Push the cassette until the machine carries the cassette in itself.
Never force the cassette in as this may damage the mechanism.

Pre-Tuning the Built in Tuner

Mis-Operation of Auto Install

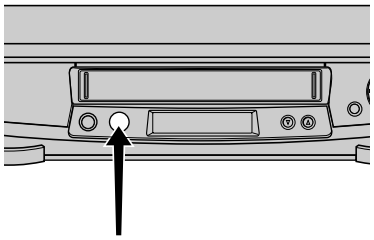
In the case of mis-operation on the Auto Installation, please follow the procedures as shown below.

1

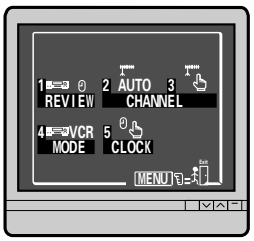


Ensure the VCR is in the operate mode (VCR display is as shown).
Make sure TV is set to the VCR programme number.

2

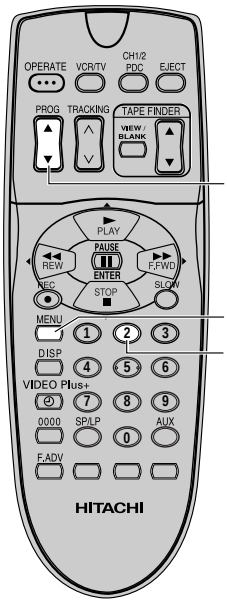


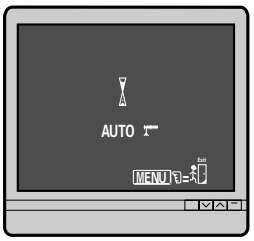
TV screen



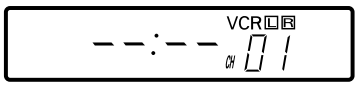
Press the MENU button.
The menu, as illustrated, appears on the TV screen.

3



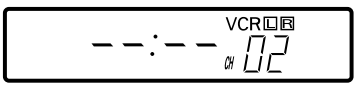


Press the ② button.
The display, as illustrated, appears on the TV screen. The VCR will automatically store channels received in your area. It takes about 3 minutes.



You can watch the progress on the TV screen when the channel numbers stop changing, pre-tuning is complete.

4



Press the PROG ▲ /▼ buttons to check the channels you can receive.
Note: If no channels have been set or a clear picture does not appear, check the aerial or scart connection.

Note: When the pre-tuning of a channel is completed, the current time may appear in the VCR's display. This is because the auto clock setting function has operated and the VCR's clock has been set automatically. (See page 18 of the instruction manual for details.)

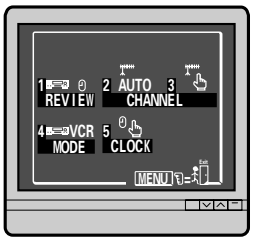
Resetting the Clock

You should only need to reset the clock if Auto Set-up did not do this. If the clock has been set , your VCR should now be fully operational and ready for use.

1

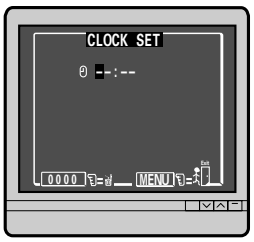
Turn the VCR and TV on, then tune the TV to the video programme number.

2



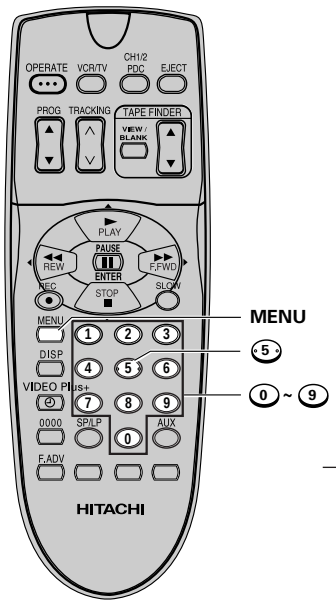
Press the MENU button.

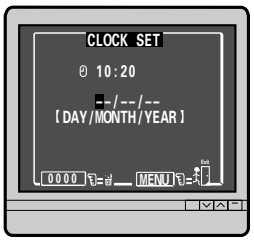
3



Press the ⑤ button for clock setting.

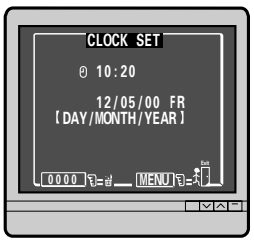
4





Enter the current time using the number keys in 24Hr notation.

e.g. 1 0 2 0 ——→ 10:20 am
2 2 2 0 ——→ 10:20 pm



Enter today's date, month and year.

e.g. 1 2 0 5 0 0 ——→ 12. May 2000
2 0 0 3 0 1 ——→ 20. March 2001

The day of the week appears automatically.

Note: At any stage during the number entry you can correct any errors by pressing the 0000 button until the incorrect digit changes to "–", then you can enter the correct number.

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After setting the date, **press the MENU button.** The time will appear in the VCR display.

FOR FURTHER INFORMATION PLEASE CONTACT OUR CUSTOMER HELP LINE ON 01628–643029

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